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September 1991

Proposed 1989/1990 California Desert Conservation Area Plan Amendments and Environmental Assessment

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ENVIRONMENTAL ASSESSMENT

CA-060-EA-1-14

PROPOSED 1989/1990 AMENDMENTS TO THE CALIFORNIA DESERT CONSERVATION AREA PLAN

PREPARED BY
Department of the Interior
Bureau of Land Management
California Desert District

The Bureau of Land Management is conducting its 1989/1990 review of the California Desert Conservation Area Plan. This Environmental Assessment considers the environmental consequences of accepting or rejecting each of nineteen proposed amendments. The amendments include Areas of Critical Environmental Concern (ACEC) (including creation of one new ACEC, deletion of one existing ACEC, two boundary adjustments, and nine redesignations from special area to ACEC status), two Multiple-Use Class (MUC) changes, a change in both MUC and vehicle access, deletion of two ephemeral grazing allotments, and the delineation of desert tortoise management categories.

Under the Bureau's preferred alternative, 17 of the proposed amendments would be accepted, one would be modified, and one would be rejected.

District Manager
California Desert

For further information contact:

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Bureau of Land Management
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Riverside, California 92507

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Dear Reader:

In January 1989, we invited you and other interested parties to review the California Desert Plan as amended and submit any comments and recommendations for proposed amendments to the Plan. The response that we received from organizations and individuals as well as from our own staff resulted in the amendment proposals contained in this environmental assessment.

My thanks to those of you who sent in comments and suggestions. I hope that you will continue to help us manage your Public Lands.

The decision to accept or reject these proposed amendments will be based on a number of factors including the effect on the natural environment, input from the public, and recommendations of the California Desert District Advisory Council.

We are providing a two-month public review of the environmental assessment. Please send your comments to this office by December 16, 1991. The address is:

Bureau of Land Management
California Desert District
ATTN: Plan Amendments
6221 Box Springs Blvd.
Riverside, California 92507-0714

A public meeting of the California Desert District Advisory Council will be held in Lone Pine, California, on October 24, 25, and 26, 1991. The 1989/1990 Amendments will be discussed at that meeting. I invite you to attend the meeting and share your thoughts with us. Details and location will be announced shortly before the meeting. Please feel free to call our toll-free line for additional information on this meeting (1-800-446-6743).

Following the public review period, there will be a 30-day protest period during which time you may protest any of the proposed amendment decisions to the BLM Director if you believe their approval would be in error. Procedures for protesting a proposed plan decision are described in Appendix E of this environmental assessment.

Sincerely,

Gerald E. Hillier
District Manager

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SUMMARY

In accordance with Chapter 7 of the California Desert Conservation Area Plan (1980) and with 43 CFR 1610.5-5 (BLM Planning Regulations), the Bureau of Land Management's California Desert District has initiated the ninth amendment review of the Plan.

Proposals for amendments were received during a 57-day period from January 12 to March 10, 1989. Twenty-six amendments were proposed by the public and the BLM staff. They were screened by BLM management and by the California Desert District Advisory Council to determine which should be considered at this time and which should be deferred, dropped, or handled by an administrative action. The following 19 proposals were accepted for consideration.

Category	Number	Description
Areas of Critical Environmental Concern	1	Manix ACEC (new)
	2	Black Mountain Cultural Area ACEC (expansion)
	3	Coachella Valley Fringe-toed Lizard Preserve RNA/ACEC (expansion, name change)
	4	Halloran Wash ACEC (deletion)
	5	Amboy Crater NNL/ACEC (new, redesignation)
	6	Bigelow Cholla RNA/ACEC (new, redesignation)
	7	Cima Dome ONA/ACEC (new, redesignation)
	8	Cinder Cones NNL/ACEC (new, redesignation)
	9	Granite Mountains RNA/ACEC (new, redesignation)
	10	Kelso Dunes NA/ACEC (new, redesignation)
	11	Turtle Mountains NNL/ACEC (new, redesignation)

Special Area Designations: ACEC = Area of Critical Environmental Concern; NA = Natural Area; ONA = Outstanding Natural Area; RNA = Research Natural Area; NNL = National Natural Landmark

Category	Number	Description
	12	Desert Lily NA/ACEC (new, redesignation)
	13	Algodones (Imperial) Dunes NNL/ACEC (new, redesignation)
Multiple Use Class Changes	14	Pipes Canyon Watershed ("L" to Unclassified)
	15	Arroyo Salada Vicinity ("I" to "M")
Multiple Use Class/ Vehicle Access	16	El Mirage Cooperative Management Area
Livestock Grazing	17	Delete Palen Ephemeral Allotment
	18	Delete Rice Valley Ephemeral Allotment
Wildlife	19	Desert Tortoise Management Categories

BLM Preferred Alternative

Based in part on the amendment-specific impacts, a preferred alternative has been selected. The preferred alternative indicates a preliminary recommendation that has been included in this EA for public comment and review. A recommendation to accept, reject, or accept a modified version of each amendment has been made: 17 amendments would be accepted, one would be rejected, and one would be accepted in modified form.

A comparison of the CDCA Plan under the No Action Alternative and the Preferred Alternative is summarized in Table S-1. The potential effects of the proposed amendments are summarized in Table S-2.

TABLE S-1

SUMMARY COMPARISON OF "NO ACTION" AND PREFERRED ALTERNATIVE

Resource	Unit of Measure	No Action	Preferred Alternative	Percent Change	New % of Desert
Multiple Use Class					
C*	Acres	2,100,000	2,100,000	0.00	15.9
L	Acres	6,151,440	6,150,960	-0.01	51.4
M	Acres	3,142,410	3,154,950	0.40	26.4
I	Acres	528,150	532,410	0.81	4.4
Unclassified	Acres	249,000	232,680	-6.55	1.9
Total		12,171,000	12,171,000		100.0
Vehicle Access					
Open	Acres	513,150	517,410	0.83	4.3
Limited	Acres	9,437,460	9,450,000	0.14	77.3
Closed	Acres	1969,390	1,969,390	0.00	16.4
Undesignated	Acres	251,000	234,200	-6.7	2.0
Total		12,171,000	12,171,000		100.0
ACECs					
Added	Number	0	10		
	Acres	0	177,062		
Expanded	Number	0	2		
	Acres	0	26,150		
Deleted**	Number	0	2		
	Acres	0	-4,420		
Net Change	Number	0	9		
	Acres	0	198,800		
Livestock Grazing					
Ephemeral Allotments	Number	19	18		
	Acres	1,315,820	1,278,020		
Ephemeral/Perennial	Number	25	25		
Allotments	Acres	3,036,270	3,036,270		
Perennial Allotments	Number	14	14		
	Acres	720,520	720,520		

* MUC "C" acreage measurements were refined during final wilderness study reporting.

TABLE S-2

SUMMARY OF POTENTIAL EFFECTS OF PROPOSED AMENDMENTS

Amend. No.	Amendment/Resources	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
1	**Manix-New ACEC**	*5,600 Acre ACEC*	*3,900 Acre ACEC*[1]	*2,950 Acre ACEC* (Preferred)	*No ACEC; Change Class "M" to "L" on 3,900 Acres*	*No Action*
	Paleontological/Cultural Resources	Slight benefit due to required plan of operations for mining and to ACEC management. Some resources are on private land. BLM would need to reach agreement with owner(s) on management of those areas.	Most resources would benefit as in Alt. A, but those on private land could be lost due to mining.	Known resources on BLM land would be protected as in Alt. A and B.	Benefit from requirement of Class "L" for plan of operations for mining, but no special ACEC management.	Could lose resources through mining, OHV activity, vandalism and inadvertent destruction.
	Wildlife/Vegetation	Minor positive effect due to requirement for plan of operations.	Same as Alt. A.	Same as Alt. A.	Same as Alt. A.	No effect.
	Recreation	Vehicle access would not be affected. There would be efforts to prevent recreational fossil collecting.	Same as Alt. A.	Same as Alt. A.	Same as Alt. A.	No effect.
	Livestock Grazing	No effect.	No effect.	No effect.	No effect.	No effect.
	Geology-Energy-Minerals	Some delay in mining could occur due to requirement for plan of operations.	Same as Alt. A.	Same as Alt. A, but less land would be affected.	Same as Alt A.	No effect.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
2	**Black Mountain ACEC**	*Enlarge Black Mountain Cultural ACEC by 32,480 Acres*. (Preferred)	*No Action*
	Cultural Resources	Enlargement of the ACEC would benefit cultural resources which are presently subject to vandalism and inadvertent damage from recreational uses such as shooting, OHV play, graffiti, camping, and rockhounding.	Impacts would continue on significant cultural resources which would not receive the priority and intensive management needed. Impacts would be caused by vandalism, theft, mining operations, and unauthorized vehicle use.
	Recreation	Increased protection and maintenance of the unique cultural resources of this area would benefit future recreationists. The educational and interpretive measures outlined in the ACEC Management Plan would increase public awareness of the value of the petroglyphs and other resources within the expansion area.	There would be a loss of educational opportunities and enjoyment for present and future recreationists due to lack of ACEC management and continued vandalism of rock art sites.
	Wildlife/Vegetation	The more intensive management would benefit wildlife and vegetation through mitigation of disturbances and increased ranger presence within the expansion area. Increased protection would be provided to the Federally- listed desert tortoise, the State-listed Mohave ground squirrel, and raptor nesting habitats.	There would be no effect.
	Minerals	There would be a loss of access and opportunity for mining and mineral development for 500 acres of significant rock art sites which are proposed for withdrawal from all mineral entry.	There would be no effect.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
3	**Coachella Valley Fringe-Toed Lizard RNA/ACEC**	*Combine Edom Hill - Willow Hole ACEC, Coachella Valley Preserve, and Indian Avenue Preserve to form Coachella Valley Fringe-Toed Lizard RNA/ACEC.* (Preferred)	*No Action*
		Consolidation of the three preserves and designation of the combined area as an RNA/ACEC would facilitate management of all of these areas and protection of the Coachella Valley Fringe-Toed Lizard and other sensitive resources.	There would be little or no effect. Management of the area would continue as outlined in the Coachella Valley Preserve System Management Plan and the ACEC Activity Plan for the Edom Hill-Willow Hole ACEC.
4	**Halloran Wash ACEC**	*Delete the Halloran Wash ACEC (#29)* (Preferred)	*No Action*
		No effect. No cultural resources requiring special management have been found within the area. Management of the desert tortoise will be the same with or without ACEC status and will be determined by the Habitat Management Plan for the Ivanpah-Shadow-Kelso area.	Present management and conditions would continue.
5	**Amboy Crater NNL/ACEC**	*Redesignate Amboy Crater NNL an NNL/ACEC.* (Preferred)	*No Action*
		There would be no effect on management or protection of the cinder cone or the crater, which is already outlined in the Amboy Crater National Landmark Plan, 1986. However, ACEC status would increase the priority of this area for funding and monitoring.	No effects are expected. The Amboy Crater NNL Management Plan will continue to guide recreation, education, and interpretation for visitors and to generally protect the cinder cone.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
6	**Bigelow Cholla RNA/ACEC**	*Redesignate Bigelow Cholla NA an RNA/ACEC.* (Preferred)	*No Action*
		RNA/ACEC designation would call visitor attention to this special area and its significance. ACEC management would protect the area from possible impacts such as OHV use. Further protection would be derived from cooperative management of the area with the University of California which owns the adjacent land.	No effects are expected. Up to the present, the unique plant assemblage at this location has not been subject to adverse conditions or actions.
7	**Cima Dome ONA/ACEC**	*Redesignate Cima Dome ONA an ONA/ACEC.* (Preferred)	*No Action*
		There would be no effect, since ACEC management would continue under the guidelines of the East Mojave National Scenic Area (EMNSA) Plan, the CDCA Plan, and the Interim Management Policy for Lands Under Wilderness Review (IMP), wherever applicable. However, ACEC status would indicate that these unique areas need special management and consideration. It could also have a minor benefit by providing increased funding for interpretation and visitor education.	Present management of these special areas would continue under the guidance of the CDCA Plan and the EMNSA Plan.
8	**Cinder Cones NNL/ACEC**	*Designate the Cinder Cones NNL an NNL/ACEC.* (Preferred)	*No Action*
		Same as Amendment Seven.	Same as Amendment Seven.

Amend. No.	Amendments/Resources	Alternate A	Alternative B
9	**Granite Mountains RNA/ACEC**	*Designate the Granite Mountains RNA an RNA/ACEC*. (Preferred)	*No Action*
		Same as Amendment Seven.	Same as Amendment Seven.
10	**Kelso Dunes ACEC**	*Designate the Kelso Dunes an ACEC* (Preferred)	*No Action*
		Same as Amendment Seven.	Same as Amendment Seven.
11	**Turtle Mountains NNL/ACEC**	*Designate the Turtle Mountains an NNL/ACEC*. (Preferred)	*No Action*
		There would be little or no effect at this time, since the area is already managed under the Bureau's Interim Management Policy for Lands Under Wilderness Review (IMP) and is protected by a vehicle closure which has been in effect since 1976. However, if Congress should not designate this areas as wilderness, ACEC status would be very beneficial in providing management for this area's unique resources.	There would be no effect at the present. The area would continue to be managed according the IMP, the vehicle closure, and the Mopah Springs ACEC Management Plan. Lack of ACEC designation at this time would make it necessary to immediately reconsider ACEC status if Congress should fail to designate the area as wilderness.
12	**Desert Lily ACEC**	*Designate the Desert Lily Preserve an ACEC*. (Preferred)	*No Action*
		ACEC designation would have little or no effect, since this small area is already protected by a perimeter fence and by withdrawal from mining. However, it could have a minor benefit by providing priority for funding for interpretation and education of visitors.	There would be no effect. Present management would continue to protect the botanical resources.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
13	**Algodones (Imperial) Dunes NNL/ACEC**	*Designate the Imperial (Algodones) Dunes NNL an NNL/ACEC.* (Preferred)	*No Action*
		No effect. The area is currently under the guidelines of the IMP, the Imperial Sand Dunes Recreational Activity Plan, and a vehicle closure. This management would continue.	There would be no effect at the present. Current management would continue. However, if Congress should not designate this area a wilderness, ACEC status would be reconsidered.
14	**Pipes Canyon: "L" to Unclassified**	*Change the MUC of Two Parcels in Pipes Canyon Watershed from "L" to "Unclassified."* (Preferred)	*No Action*
		Administration of the public lands in this region would benefit. The change from Class "L" to "Unclassified" would make these parcels available for sale or exchange. This would be consistent with the other public lands in this area.	There would be no effect. These small parcels would remain unavailable for sale or exchange and difficult to manage because of their isolation.
15	**Arroyo Salada: "I" to "M"**	*Change MUC of 10.5 Sections in Arroyo Salada Open Area from "I" to "M."* (Preferred)	*No Action*
	General	Potential impacts are based on the assumption that following its conversion to Class "M", this land will be transferred from BLM to the State of California for addition to the Ocotillo Wells State Vehicle Recreation Area (SVRA), an area for OHV play.	There would be no effect.

Amend. No.	Amendment Resources	Alternative A	Alternative B
15	Wildlife/Vegetation	The effect will depend upon the intensity of use of the OHV open area under CA Parks and Recreation management. Although the area is presently open to OHVs, an increase in use could cause a loss in vegetation and decreased habitat for two candidate species, the Flat-tailed Horned Lizard and the Colorado Desert Fringe-toed Lizard.	Impacts to habitats and disturbance of wildlife and vegetation would continue at present levels.
	Cultural Resources	There should be little or no effect on cultural resources. Prior to any transfer of lands to the State, the BLM will inventory, evaluate, and treat any significant cultural resources in consultation with the State Historic Preservation Officer or the President's Advisory Council on Historic Preservation.	No effect is expected.
	Recreation	In the short-term, the amendment should have little or no effect on recreation in this area. However, as the checkerboard land is consolidated into one large vehicular recreation area, OHV play and competitive event opportunities will increase, and OHV recreationists will benefit.	Recreation would remain the same as under present management.
	Soils	The long-term result of full development of the SVRA would be the usual effects of heavy OHV use, including soil compaction and erosion from run-off and wind.	There would be no effect.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
16	**El Mirage Cooperative Management Area - MUC & Vehicle Access**	*Change Multiple Use Class and Vehicle Access in El Mirage Cooperative Management Area.* (Preferred)	*No Action*
	Recreation	Vehicle recreationists would benefit by having approximately 24,400 acres of public land within the Management Area available for OHV play. (This includes 12,000 acres which BLM would acquire through future land acquisition.) Outside the Management Area, vehicles would have limited access, and there would be a loss of opportunity for the OHV play which has been occurring.	There would be no effect in the short-term. The entire amendment area would continue to serve as a de facto open area, as OHV users trespass on private property and use county roads. However, in the future, it is likely that pressure from private landowners would lead to closure of the area to vehicle access, thus depriving many residents of Antelope and Victor Valleys of this type of recreation and placing demands on law enforcement agencies as OHV trespass is transferred to other parts of Southern California.
	Socio/Economic	There would be a benefit to landowners outside the Management Area due to restriction of OHV play in their areas. The result would be less trespassing and less conflict between recreationists and residents. Off-highway vehicle recreation would be available only inside the Management Area.	The loss of recreation-related business would have a moderate effect on the local tax base, as the capacity for several hundred thousand visitors per year could be lost. Landowners would have to resolve the trespass issue on their own, and all problems associated with unmanaged recreation would resurface.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
16	Wildlife	Within the Management Area, there would be a negative effect on wildlife, including the desert tortoise and the Mohave ground squirrel. This impact would increase as the private land was purchased by the Bureau and designated "open" to vehicles. Outside the Management Area, the effect would be positive, since OHV access on 9,000 acres of public land would be "limited." The Habitat Management Plan for the Western Mojave area will determine management of the desert tortoise throughout this area.	There would be no immediate effect. the long-range effect would depend upon the rapidity of urban development within the amendment area. Management of the desert tortoise would be guided by the West Mojave Habitat Management Plan, but it is possible that all native habitat could eventually be lost.
	Cultural Resources	There could be a minor benefit to cultural resources. Implementation of the Management Plan would include inventory and recording of cultural resources and protection of them through barriers, vehicle closures, or route designation. This would be done on existing public land and on parcels of private land prior to their acquisition.	There would be no change in short-term effects. Potential cultural sites would continue to be impacted; only during the disposal process would they be identified and protected if appropriate. On private lands, sites would remain vulnerable to loss through development.
	Minerals/Mining	There would be a minor benefit within the Management Area, since mineral exploration and development would be allowed to continue on the public lands. Outside the Management Area there would be no effect.	In the long-term, there would be a negative effect on mining operations. Approximately 20,000 acres of public land would remain available for urban development, which could result in the loss of opportunity for mineral entry in the Management Area.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
17	**Delete Palen Grazing Allotment**	*Delete the Palen Ephemeral Grazing Allotment.* (Preferred)	*No Action*
	Livestock Grazing	There would be no direct effect. Grazing has not occurred on the Palen allotment for over 10 years. However, deletion of the allotment would eliminate the opportunity for future grazing in this area.	Maintaining the allotment could benefit grazing in the long run. When weather conditions improve, grazing would be permitted in this area.
	Wildlife	There would be a positive effect on bighorn sheep if the California Department of Fish and Game carries out its plan to introduce bighorn sheep into the Palen Mountains and augment the population in the Granite Mountains. Deletion of the allotment would assure that pathogenic organisms would not be transmitted from domestic sheep to the bighorn.	There would be no effect at present. However, when the drought ends and grazing conditions improve, reestablishment of ephemeral grazing would discourage reintroduction of bighorn sheep in the Palen Mountains and augmentation of the bighorn population in the Granite Mountains.
	Vegetation	There would be a minor benefit. When drought conditions improve, removal of grazing from this area would provide more ephemeral vegetation for native wildlife.	There would be no effect.
	Cultural Resources	A small benefit could result from removing the potential for herds of domestic sheep trampling artifacts which occur in the southern part of the allotment.	There would be no effect.

Amend. No.	Amendment/Resources	Alternative A	Alternative B
18	**Delete Rice Valley Grazing Allotment**	*Delete Rice Valley Ephemeral Grazing Allotment*	*No Action* (Preferred)
	Livestock Grazing	There would be a negative effect on ephemeral grazing. A lease was issued on the allotment in 1990, and the heavy rains in March 1991 made grazing feasible this Spring. Grazing would also be practical in the future depending on the yearly rainfall.	Maintaining the allotment would benefit ephemeral grazing. Heavy rains in March 1991 showed that grazing is feasible during years of average rainfall.
	Wildlife	There would be no effect. Deletion of the allotment and prevention of grazing by domestic sheep would not facilitate the reintroduction of bighorn sheep in this area because ephemeral grazing occurs on private lands south of the allotment, and bighorn would be subject to the same hazards that deletion of this allotment is trying to prevent.	There would be little or no effect on wildlife. Since there is ephemeral grazing on adjacent private lands, it is unlikely that the Department of Fish and Game would introduce bighorn sheep in this area even if it were not a grazing allotment.
	Vegetation	There would be a minor benefit. When drought conditions improve, removal of grazing from this area would provide more ephemeral vegetation for native wildlife.	There would be no effect.
19	**Desert Tortoise Management Categories**	*Delineate Three Categories for Desert Tortoise Management*. (Preferred)	*No Action*
		Although administrative in nature, the assignment of categories demonstrates the intent of the Bureau to establish management priorities for habitat areas so that large, viable populations of the desert tortoise can be maintained. The habitat management plans and the actions prescribed in them will receive full environmental analysis.	Use of the Crucial Habitat areas from the CDCA Plan for defining management categories for the desert tortoise would be inferior in achieving the goal of maintaining tortoise populations.

CHAPTER 1
INTRODUCTION

CHAPTER ONE

INTRODUCTION

In accordance with Chapter 7 of the California Desert Conservation Area Plan (1980) and with 43 CFR 1610.5-5 (BLM Planning Regulations), the Bureau of Land Management's California Desert District has initiated the ninth amendment review of the Plan.

Proposals were accepted during a 57-day period from January 12 to March 10, 1989. Twenty-seven amendments were proposed by the public and the BLM staff for consideration during the review. The proposals were screened by BLM management and by the California Desert District Advisory Council to determine which ones met the following criteria:

(1) Is the proposed amendment based on new data not considered when the plan was developed?

(2) Does the information represent a change in legal or regulatory mandate?

(3) Is the supporting detail sufficient and the problem clearly stated so that the request can be considered?

(4) Does the information represent a formal change in State or local government or agency plans?

The following 19 proposals were accepted for consideration. Most of the amendments address site-specific issues. Map 1-1 indicates their regional locations; site-specific maps can be found in Appendix A.

Category	Number	Proposed Action
Areas of Critical Environmental Concern (ACECs)		
New	1	Designate an ACEC near Manix for protection of paleontological resources.
Expand boundaries	2	Expand boundary of Black Mountain Cultural Area ACEC (No. 35).
	3	Combine the Edom Hill/Willow Hole ACEC with the Coachella Valley Preserve and the Indian Avenue (Whitewater Floodplain) Preserve to form the Coachella Valley Fringe-Toed Lizard Preserve RNA/ACEC.
Delete	4	Delete Halloran Wash ACEC (#29).

Special Areas: ACEC = Area of Critical Environmental Concern; NA = Natural Area; ONA = Outstanding Natural Area; RNA = Research Natural Area; NNA = National Natural Landmark

Category	Number	Proposed Action
A.C.E.C.s (cont.)		
Reclassify Special Areas to ACEC Status	5	Redesignate Amboy Crater NNL as an NNL/ACEC.
	6	Redesignate Bigelow Cholla NA as an RNA/ACEC.
	7	Redesignate Cima Dome ONA as an ONA/ACEC.
	8	Redesignate Cinder Cones NNL as an NNL/ACEC.
	9	Redesignate Granite Mountains RNA as an RNA/ACEC
	10	Redesignate Kelso Dunes ONA as an ONA/ACEC.
	11	Redesignate Turtle Mountain NNL as an NNL/ACEC.
	12	Redesignate the Desert Lily Preserve NA as an ACEC.
	13	Redesignate Algodones Dunes NNL an NNL/ACEC.
Change Multiple-Use Class	14	Change MUC designation of two parcels in Pipes Canyon watershed from "L" to "unclassified."
	15	Change MUC of 10.5 sections of Class "I" land in Arroyo Salada open area to Class "M" to allow transfer to State of California Parks and Recreation Department.
Change MUC and Vehicle Access	16	Within the El Mirage Cooperative Management Area and surrounding area: change MUC from "unclassified" to Classes "I" or "M"; change vehicle access from "undesignated" to "open" or "limited."
Livestock Grazing	17	Delete Palen Ephemeral Grazing Allotment from Grazing Element.
	18	Delete Rice Valley Ephemeral Grazing Allotment from Grazing Element.
Wildlife	19	Delineate Three Categories for Desert Tortoise Management

The final decision on whether or not to approve each amendment will be made following a 60-day public review of the EA. The decision will be based upon several factors, including the findings of this EA, the public response during the review period, and the recommendations of the Desert Advisory Council.

PURPOSE AND NEED

AMENDMENTS CONCERNING AREAS OF CRITICAL ENVIRONMENTAL CONCERN (NOs. 1 through 13)

The Federal Land Policy and Management Act of 1976 (FLPMA) set forth a national policy for designation and protection of areas of critical environmental concern (ACECs)(Sect. 202 (c)(3)). FLPMA mandates the BLM to give priority to the designation and protection of ACECs in the development and revision of land use plans. The 1980 CDCA Plan established 75 ACECs on the public lands of the California Desert. In the years of plan implementation from 1980 through 1988, nine new ACECs were designated and seven were deleted through the plan amendment process. The resulting total of ACECs in the CDCA is now 77.

The 1989/1990 CDCA Plan Amendments include the following proposals: a new ACEC for protection of paleontological resources; expansion of two existing ACECs; deletion of an ACEC because the resources needing protection are not on public lands; and redesignation of nine special areas (NAs, ONAs, RNAs and NNLs) as ACECs in accordance with California BLM's "umbrella" policy, discussed below.

Prior to the passage of FLPMA, the Bureau of Land Management used a number of designations to identify areas of special interest with unique or outstanding values. Among these are Outstanding Natural Areas (ONAs), Research Natural Areas (RNAs), and Natural Areas (NAs). Areas in the CDCA which were designated as ONAs, RNAs, or NAs under authorities other than FLPMA are listed in Appendix C of the CDCA Plan. The Secretary of the Interior also designates National Natural Landmarks (NNLs), National Historic Landmarks, National Register of Historic Places, National Trails, Man and the Biosphere Reserves, and National Recreation Lands.

In 1988, in an effort to eliminate the proliferation of designations for areas requiring special management, California BLM developed the ACEC "umbrella" concept, under which all special areas will be designated as ACECs (Appendix B, Instruction Memo CA-88-243). Areas in the CDCA which were designated as ONAs, RNAs, or NAs in early land use plans have been reviewed to determine which ones warrant consideration for ACEC designation. Nine special areas were found to meet ACEC criteria. Their designation as ACECs is considered in Amendments Five through Thirteen. Many of the remaining special areas were given ACEC status in the CDCA Plan (1980). Others were eliminated because they do not meet the ACEC criteria or are protected by other means. Primitive Area and Recreational Land designations were deleted since they are superseded by FLPMA and the CDCA Plan. All National Natural Landmark (NNL) designations are continued, since they are under the authority of the National Park Service. The special area designations which are being deleted by this clarification of the CDCA Plan and the reason for their deletion are listed in Appendix C.

The ACEC designation indicates to the public that "the BLM recognizes that an area has significant values and has established special management measures to protect those values (BLM Manual, Section 1613).

The purpose of this amendment and associated environmental assessment (EA) is to determine whether the resources or values contained in the areas proposed for ACEC designation and expansion meet the ACEC criteria in the BLM's planning regulations (43 CFR 1610.7-2). The criteria include the following: (1) relevance - "there shall be present a significant historic, cultural, or scenic value; a fish or wildlife resource or other natural system or process; or natural hazard;" and (2) importance - "the above described value or resource shall have substantial significance or values and should generally have qualities of more than local significance." In addition, the BLM must determine whether the resources or values which meet the criteria require special attention and, therefore, warrant designation and protection as an ACEC.

Evaluation of an area's qualification for ACEC designation requires consideration of one or more of its values and resources. Among these are cultural, paleontological, scenic, wildlife, vegetation, air quality, and others. The effects, if any, of ACEC designation on recreation, livestock grazing, energy development, utility corridors, and mineral exploration and development are also of importance.

CHANGE MULTIPLE-USE CLASS TO FACILITATE LAND DISPOSAL (NOs. 14 and 15)

According to the CDCA Plan, as amended in 1983, the sale or exchange of public land is allowed only in multiple-use class (MUC) M or in unclassified land. Lands in Classes C, L, or I can be disposed of only if their classification is changed through the plan amendment process. Two current amendments propose such a change.

Amendment Fourteen proposes a change in MUC from L to unclassified for two parcels of isolated lands in the Pipes Canyon watershed of the Morongo Basin, a total of approximately 480 acres. Other scattered public lands in this area are designated unclassified. These two parcels are difficult to manage due to their isolated setting, and they cannot be disposed of because of their MUC designation. Changing the MUC to unclassified would make the parcels available for sale or exchange.

Amendment Fifteen was proposed by the State of California Department of Parks and Recreation. It would change the MUC of approximately 10.5 sections of land in the Arroyo Salada open area from Class I to Class M. The Parks Department intends to apply through the Recreation and Public Purposes (R & PP) Act for 8.5 sections to be added to the adjacent Ocotillo Wells State Vehicle Recreation Area (SVRA). Two additional sections would remain with the BLM but would be changed to Class M in order to conform with the surrounding lands to the north and east. Use of the land to be transferred to the State of California would be unchanged from its present use as an OHV open area. The State of California has arranged to purchase private lands intermingled with the subject 8.5 sections in order to complete the enlarged SVRA. This change in MUC is necessary to permit this transfer of public land to State Parks.

Evaluation of these amendment proposals will consider the effect of changes in land use classification on future manaagement of these lands by the Bureau, on facilitation of their disposal for other uses, and on the potential effects of these other uses on the land and its resources.

CHANGE MULTIPLE-USE CLASS AND MOTORIZED VEHICLE DESIGNATIONS (NO. 16)

Conflict between recreationists and private land owners in the area of El Mirage Dry Lake and the Shadow Mountains dates back to the 1930's, when the area was first "discovered" by automotive racing enthusiasts of the Los Angeles Basin. The public and private lands in this region are intermixed, and recreational visitors unintentionally trespass on the private land. The local communities have demanded that action be taken to reduce recreation-related impacts such as trespass, littering, and vandalism. The CDCA Plan (1980) did not address the problems in the area, and its designation of El Mirage Dry Lake as an OHV open area and the surrounding public lands as "unclassified," or suitable for disposal, was not a viable solution for long-term management of the area. Disposal of the public lands and continued urbanization could virtually eliminate OHV recreation opportunities in the area.

In 1986, the BLM joined with the Counties of Los Angeles and San Bernardino, the State of California Department of Parks and Recreation, and the California Off-Highway Motor Vehicle Recreation (OHMVR) Commission in seeking a solution to the conflict. In November 1988, an Interagency Agreement was signed by the agencies listed above, and the BLM prepared a plan which will guide the development and long-term management of the El Mirage Cooperative Management Area. The goal is to allow intensive OHV use within the Management Area, in exchange for prohibiting such use in the land surrounding the Management Area.

Implementation of the El Mirage Cooperative Management Area Plan (August 1990) requires the adoption of Amendment 16 to the CDCA Plan. It would change the multiple-use class designation within the Management Area from "unclassified" to "I" (intensive use) and vehicle access designation from undesignated to "open." As private land within the Management Area is acquired, it would automatically be designated MUC "I" and "open." Outside the Management Area, two-thirds of the unclassified lands would be changed to MUC "M", and one-third would remain "unclassified" and available for disposal. Motorized vehicle access on these scattered public lands would be changed from undesignated to "limited."

DELETION OF EPHEMERAL GRAZING ALLOTMENTS TO PERMIT REINTRODUCTION OF DESERT BIGHORN SHEEP (N0s. 17 and 18)

Recent studies and experiences in California have shown that diseases can be transmitted from domestic sheep to native bighorn sheep. Two amendments propose deletion of ephemeral sheep grazing allotments as a necessary prerequisite to reintroduction of bighorn sheep into mountain ranges adjacent to the allotments.

Amendment Seventeen proposes deletion of the Palen Allotment (No. 63). The California Department of Fish and Game plans to transplant bighorn sheep into the adjacent Granite and Palen Mountain ranges. Amendment Eighteen would delete the Rice Valley allotment (No. 62) to permit reintroduction of bighorn into the adjacent Big Maria and Little Maria Mountains.

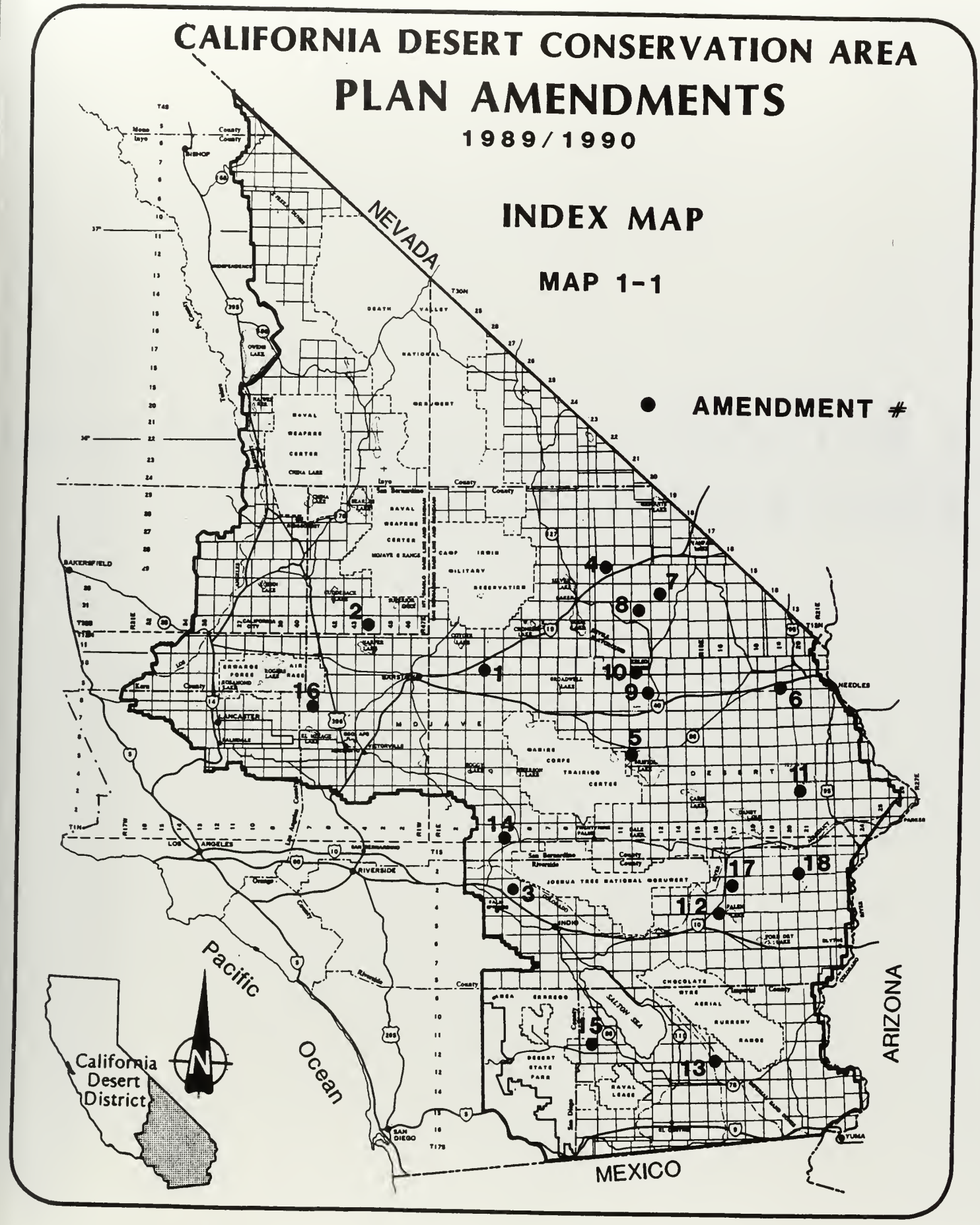
Both of the above allotments were reduced in area during completion of the CDCA Plan, in order to avoid the possibility of domestic sheep grazing within the area designated by the California Department of Fish and Game for potential use by bighorn sheep. However, these adjustments did not allow for potential migration of bighorn between the adjacent mountain ranges following

their reintroduction. Therefore, it is now necessary to reconsider the potential impact of domestic sheep on bighorn if they are transplanted to these areas.

ESTABLISHMENT OF DESERT TORTOISE MANAGEMENT CATEGORIES (NO. 19)

Desert tortoise densities have been decreasing steadily in many areas of the California Desert Conservation Area, as well as in tortoise habitat throughout Arizona, Nevada, and Utah. In April 1990, the U.S. Fish and Wildlife Service listed the desert tortoise as "threatened." Because the tortoise occurs largely on public lands administered by the Bureau of Land Management, it is the Bureau's responsibility to do everything within its authority to protect this species and its habitat. Strategies to manage the habitat in order to ensure a viable desert tortoise population are outlined in the document "Desert Tortoise Habitat Management on the Public Lands: a Rangewide Plan," signed by the BLM Director in 1988. The Rangewide Plan defined three categories of desert tortoise management on the basis of four criteria: (1) importance of habitat to maintaining viable populations, (2) resolvability of conflicts, (3) tortoise density, and (4) population status (stable, increasing, decreasing).

The Bureau Director instructed BLM offices to implement the recommendations of the Rangewide Plan. Amendment Nineteen will define the management categories and delineate the boundaries for Categories I and II within the CDCA. These boundaries will be reevaluated during development of Habitat Management Plans.


CALIFORNIA DESERT CONSERVATION AREA
PLAN AMENDMENTS
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CHAPTER 2
ALTERNATIVES

CHAPTER TWO

AMENDMENTS AND ALTERNATIVES

AMENDMENT ONE
DESIGNATE AN ACEC AT MANIX TO PROTECT PALEONTOLOGICAL RESOURCES

Alternative A:

Designate an ACEC on a 5,600-acre area 25 miles east of Barstow along the Mojave River (Appendix A, Map 1A). This alternative was proposed by George T. Jefferson, Associate Curator of the Natural History Museum of Los Angeles County. The area is an important late Pleistocene paleontological and archaeological research area.

The proposed ACEC is within the Cady Mountains grazing allotment. Management of the ACEC would allow the allottee continued access to the allotment on already existing routes. The northern portion of the proposed ACEC is crossed by the Mojave Road, a historic route which is presently used for four-wheel touring. ACEC management would not restrict this activity but would attempt to prevent recreational fossil collection. ACEC status would require that a Plan of Operations be prepared prior to all mining activities other than casual use; this would provide an opportunity to consider what additional measures would be needed to safeguard fossil resources.

A management plan would be prepared following ACEC designation to define monitoring requirements and other measures needed to preserve the scientific and research qualities of this unique region. Existing authorized uses would be allowed to continue, including grazing, recreation, mining, and use of authorized or designated access routes. However, modifications, expansions, and maintenance of facilities by authorized users would require review and approval of the Barstow Resource Area Manager. The management plan may make modifications in uses if such are deemed necessary as a result of monitoring, but only after public review and input.

The 5,600-acre ACEC would contain 1,700 acres of privately owned lands. Nothing herein applies or extends BLM management or protection to these lands without formal agreements between BLM or other agencies and the private landowners.

Alternative B:

Designate only the 3,900 acres of public lands within the border of the proposed ACEC. (Appendix A, Map 1B). Management would be the same as for Alternative A, except that elimination of private lands would avoid the need for agreements with landowners.

Alternative C: Preferred

Designate only the limited area (2,950 acres) of public land containing the sections with known fossil sites (Appendix A, Map 1C). Peripheral Manix Lake deposits would be excluded from ACEC status. Management would be the same as for Alternatives A and B.

Alternative D:

Do not designate an ACEC, but change the Multiple-Use Class of the 3,900-acre area of public land from "M" to "L" (Appendix A, Map 1B). This would provide protection similar to that of an ACEC, since Class "L" guidelines also require a plan of operations prior to all mining activities other than casual use.

Alternate E: No Action

Do not designate an ACEC. Continue to manage the area under the guidelines of Class "M".

AMENDMENT TWO
ENLARGE BLACK MOUNTAIN CULTURAL AREA ACEC (No. 35)

Alternative A: Preferred

Enlarge the Black Mountain Cultural Area ACEC (5,120 acres) by adding 32,480 acres (17,920 acres public land, 13,120 acres Catellus Development Corporation lands (formerly Santa Fe Pacific lands), and 1,440 acres State lands) (Appendix A, Map 2). The ACEC is approximately 22 air miles northwest of Barstow in the west-central portion of San Bernardino County. In preparing a management plan, the Bureau's archaeology staff found that the extraordinary cultural resources extended well beyond the original ACEC boundary. The plan, completed in September 1988, proposed enlarging the ACEC to include these newly found resources. The new boundary would follow existing well-defined vehicle routes which approximate the perimeter of the basalt flow on the east side of the planning area.

Management actions for public lands and resources within the ACEC would include the following: (1) acquire, through exchange, the private and state land within the expanded ACEC; (2) re-designate selected routes of travel from "open" to "closed"; (3) direct vehicles away from sensitive cultural resources, using barriers and signs; (4) continue research, identification, and documentation of cultural resources through survey and potential data recovery (when necessary); (5) increase protection of cultural resources through ranger patrol; (6) nominate the cultural properties in the expanded ACEC to the National Register of Historic Places; (7) petition the Secretary of the Interior for withdrawal of all significant rock art sites from mineral entry (approximately 500 acres).

Alternative B: No Action

Do not enlarge the ACEC. Continue to manage the lands surrounding the existing ACEC according to Class "L" guidelines, without additional ACEC management.

AMENDMENT THREE
DESIGNATE THE COACHELLA VALLEY FRINGE-TOED LIZARD RNA/ACEC

Alternative A: Preferred

Combine the 1,694-acre Edom Hill-Willow Hole ACEC (No. 79) with the Coachella Valley Preserve (7,000 acres) and the Whitewater Floodplain (Indian Avenue) Preserve (1,230 acres) to form the Coachella Valley Fringe-Toed Lizard Preserve RNA/ACEC (Appendix A, Map 3).
In 1980, the Coachella Valley Fringe-toed Lizard (Uma inornata) (CVFTL) was Federally-listed as a "threatened" species and State-listed as "endangered." The listings were prompted by the rapid reduction of the lizard's critical habitat due to agricultural and urban development. In 1985, a Habitat Conservation Plan (HCP) was completed by The Nature Conservancy (TNC), with the cooperation of the Bureau of Land Management, the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Game, the Agua Caliente tribe, the Coachella Valley Water District, the County of Riverside, and the incorporated cities of the Coachella Valley. The HCP called for the establishment of three separate preserves that, together, contain the ecosystems needed to support the CVFTL and other sensitive species which are candidates for Federal listing. The most notable among these ecosystems are blow-sand fields.

The Coachella Valley Preserve System Management Plan (CVPSMP) was prepared in 1986 to provide guidance for management of the resources within the three preserve areas. Management actions include the following: (1) eliminate the OHV trespass problem by fencing, signing, road closures, patrolling and public education; (2) remove exotic plants, including salt cedar (Tamarix pentandra) and athel (Tamarix aphylla) by cutting and application of herbicides; monitor Russian thistle and also consider biological, chemical, or manual removal; (3) remove abandoned buildings; (4) develop hiking and equestrian trails; (5) prepare and distribute educational brochures, and (6) monitor rare plant and animal species.

The Edom Hill-Willow Hole Preserve was designated an ACEC (No. 79) in 1984 to protect the CVFTL, other sensitive plants and animals, archaeological resources, and cultural values, all of which were being threatened by heavy recreational vehicle use. Sensitive species included the Least Bell's Vireo, Federally and State-listed as endangered, and two Federal candidate plant species. Addition of the Coachella Valley Preserve and the Whitewater Floodplain (Indian Avenue) Preserve will consolidate these three areas into a single RNA/ACEC and facilitate management of CVFTL habitat. Management prescriptions are described in the Coachella Valley Preserve System Management Plan.

Alternative B: No Action

Do not add the Coachella Valley or Whitewater Floodplain reserves to the existing ACEC. Because of previous commitments by the Bureau to the agencies listed above to protect the CVFTL in these two areas, as well as in the Edom Hill/Willow Hole area, the Bureau will continue to manage these lands for protection of the lizard and its habitat under the CVPSMP.

AMENDMENT FOUR
DELETE HALLORAN WASH ACEC (NO. 29)

Alternative A: Preferred

Delete the Halloran Wash ACEC (NO. 29). The ACEC is located 15 to 20 miles northeast of Baker, California, and immediately north of Interstate 15 on land designated Multiple-Use Class "M". It incorporates the westerly trending Halloran Wash and an adjacent southwesterly trending drainage which merges near Halloran Springs. The total area approximates 2,500 acres (Appendix A, Map 4). This area was originally nominated as an ACEC in recognition of its potential to yield data pertaining to Anasazi turquoise, which had been found on adjacent patented lands. However, no such resources have been identified within the ACEC. In 1982, the ACEC was expanded to include an area thought to contain petroglyphs, with the intent of protecting such resources from vandalism and recreational activities. Recent on-site examination showed that the petroglyphs were on private land outside the ACEC boundary, and it is evident that special management is not needed. Therefore, deletion of the ACEC is proposed.

Without ACEC status, the land would be managed according to Class M guidelines.

Alternative B: No Action

Continue the ACEC designation. Continue implementing the ACEC management plan.

AMENDMENT FIVE
DESIGNATE AMBOY CRATER AN NNL/ACEC

Alternate A: Preferred

Designate the Amboy Crater and its surrounding area (640 acres) as an NNL/ACEC (Appendix A, Map 5). The crater is located in San Bernardino County 2.5 miles west of the small desert town of Amboy along the National Trails Highway (formerly historic U.S. Highway 66). A 5,760-acre parcel at Amboy Crater was designated in 1973 as a National Natural Landmark (NNL) in recognition of its outstanding scenic quality and unique geologic features. Lands included in the NNL are administered by the BLM, except for sections 10 and 15 which are part of the Twentynine Palms Marine Corps Training Base. The National Park Service is responsible for preparation of an annual report to Congress on the condition and trend of resources within all NNLs.

In 1987, BLM's Needles Resource Area developed a plan for management and protection of resources at Amboy Crater, while also enhancing recreational and educational opportunities for the crater's many visitors. The plan proposed that the area of the NNL be reduced from its present 5,760 acres to 640 acres, the area immediately surrounding the crater. The rationale is that the present NNL boundary encompasses the crater's entire lava flow, whereas the significant part of the NNL is the cinder cone, itself, and its immediate area. Reducing the area of the NNL to this more manageable size is being considered by the National Park Service. This amendment proposes adding the ACEC designation to this 640-acre area.

In addition to reducing the NNL boundary, the Amboy Crater NNL Management Plan proposes a protective withdrawal from mining activity, a firearm closure, interpretive signing, construction of a small day-use facility, a barrier to prevent vehicle access beyond the day-use site, restoration

of a scar along the north face of the cinder cone, and an interpretive trail to the top of the cone. No additional management actions are proposed.

Alternate B: No Action

Do not designate an ACEC. Manage the area according to the existing NNL Management Plan.

AMENDMENT SIX
DESIGNATE BIGELOW CHOLLA NA AN RNA/ACEC

Alternate A: Preferred

Designate the 80-acre Bigelow Cholla Natural Area an RNA/ACEC. This area lies on both sides of Interstate 40 in the Sacramento Mountains, in the southwest portion of Section 22, T9N, R20E (Appendix A, Map 6). It is within an Unusual Plant Assemblage (UPA), the Sacramento/ Stepladder Mountain Teddy Bear Cholla (Opuntia bigelovii) Assemblage. This is the northern-most population and the densest-known concentration of Bigelow Cholla in the CDCA. The site is adjacent to land owned by the University of California (Section 21, R20E, T9N) as part of its Natural Reserve System. In 1972, the area was withdrawn from mineral entry under the mining laws but not the mineral leasing laws pursuant to Section 204 of FLPMA.

Management of the ACEC would include a proposal to continue the mineral withdrawal under FLPMA when withdrawal review is conducted. The Bureau would pursue an MOU (memorandum of understanding) with the University of California to address cooperative research activities in the area. The MOU would serve as the ACEC Management Plan.

Alternative B: No Action

Designate no RNA/ACEC. Continue to manage the area as a Natural Area under the Multiple-Use Class "M" guidelines.

AMENDMENT SEVEN
DESIGNATE CIMA DOME ONA AN ONA/ACEC

Alternative A: Preferred

Designate the Cima Dome ONA an ACEC. Cima Dome is a well known geologic feature located in the north-central portion of the East Mojave National Scenic Area (EMNSA). This 18,320-acre area was designated an ONA is 1972 (Appendix A, Map 7). It was withdrawn from mineral entry under the mining laws, but not the mineral leasing laws pursuant to Section 204 of FLPMA. This area contains the major portion of an outstanding Joshua Tree forest, as well as other important resources. An additional 320 acres would be added in the area of Wildcat Butte, bringing the total area of the ACEC to 18,640 acres. The 320-acre Wildcat Butte area would be withdrawn from mineral entry.

Management actions would be those prescribed in the EMNSA Plan which are applicable to this area. Generally, the Scenic Area is managed according to Multiple Use Class "L" guidelines. Scenic values will be given special consideration in authorizing uses. Permits will stipulate

mitigating measures designed to reduce scenic intrusion and will require strict reclamation and restoration. Special management actions prescribed by the EMNSA Plan for Cima Dome include the following: (1) maintain the 18,640-acre mineral withdrawal (this includes the addition of the 320-acre Wildcat Butte area); (2) acquire one section of State land within the ACEC boundary through exchange; (3) close several routes to protect natural values in the Joshua Tree woodland; (4) test springs routinely; and (5) develop and maintain hiking trails through the ACEC.

Alternative B: No Action

Do not designate an ACEC. Continue management as an ONA under the guidelines of the East Mojave National Scenic Area Plan.

AMENDMENT EIGHT
DESIGNATE THE CINDER CONES NNL AN NNL/ACEC

Alternative A: Preferred

Designate the Cinder Cones NNL an NNL/ACEC. The 24,320-acre Cinder Cones National Natural Landmark (NNL) is west of Cima Dome in the East Mojave National Scenic Area (Appendix A, Map 8). The region contains extensive lava flows interspersed with over 30 dormant volcanic cones which are noted for their petroglyph-covered basalts. Most of the cones are included in the NNL, which was designated in 1975. Part of this area was previously designated an Outstanding Natural Area (ONA). Because of the outstanding and unique resources, the BLM proposes making the entire area of the NNL an ACEC.

A withdrawal from mineral entry protects 4,160 acres within the NNL and 640 acres adjacent to the east border, a total of 4,800 acres. The additional 640 withdrawn acres would be added to the existing NNL, bringing the total area of the proposed ACEC to 24,960 acres.

Management actions prescribed for the entire Scenic Area by the EMNSA Plan will also be applicable to the Cinder Cones (see Amendment Seven). In addition, measures specific to the Cinder Cones ACEC are the following: (1) Maintain a 20,320-acre withdrawal within the ACEC boundary segregating the area from mineral entry under the mining laws, but not the mineral leasing laws pursuant to Section 204 of FLPMA. This withdrawal includes the 4,800 acres currently segregated and proposes withdrawal of an additional 15,320 acres. (2) Acquire 1,280 acres of state land through exchange within the proposed ACEC boundary. (3) Close several routes to protect cultural and natural resources. (4) Limit the extraction of mineral materials (sand, gravel, cinders) to that amount required by local governments.

Alternative B: No Action

Do not designate an ACEC. Continue management as a NNL under the guidelines of the East Mojave National Scenic Area Plan.

AMENDMENT NINE
DESIGNATE THE GRANITE MOUNTAINS RNA AN RNA/ACEC

Alternative A: Preferred

Designate the 6,680-acre Granite Mountains RNA an RNA/ACEC (Appendix A, Map 9). The Granites are noted for their unusually diverse range of plants and animals. In 1986, this area was designated a Research Natural Area. It is jointly managed by the BLM and the University of California to protect its environment for research purposes.

The area would be subject to the management guidelines of the EMNSA Plan which apply to the entire Scenic Area (see Amendment Seven). In addition, special actions prescribed for the area of the Granite Mountains RNA/ACEC include the following: (1) Acquire one state section inside the ACEC boundary through exchange. (2) Propose a 11,280 acre withdrawal at the Granite Mountains, segregating the area from mineral entry under the mining laws, but not under the mineral leasing laws pursuant to Section 204 of FLPMA. The proposed withdrawal would cover the entire ACEC and would include 1,680 currently segregated acres (520 of which are within the proposed ACEC), and 9,600 additional acres. (3) Close several routes to maintain cultural and natural resources. (4) Establish a no-shooting zone to include the entire RNA/ACEC in order to protect researchers and recreationists. (5) Maintain a Cooperative Agreement with the University of California to jointly manage the RNA/ACEC.

Alternative B: No Action

Do not designate an ACEC. Continue joint management of the existing RNA with the University of California, in compliance with the guidelines of the East Mojave National Scenic Area Plan.

AMENDMENT TEN
DESIGNATE KELSO SAND DUNES ONA AN ONA/ACEC

Alternative A: Preferred

Designate the Kelso Sand Dunes an ACEC. The proposed ACEC would coincide with the 49,065-acre portion of the Kelso Sand Dunes Wilderness Study Area (CDCA-250) which has been recommended for wilderness designation (Appendix A, Map 10). The Kelso Dunes are a unique ecosystem with great species diversity. They provide habitat for a specialized group of plants and animals, many of which are indigenous to this area and occur nowhere else. Rising to heights of over 600 feet above the desert floor, the visually spectacular Kelso Dunes are one of the three tallest dune systems in North America.

The importance of protecting the dunes and their unique flora and fauna was recognized by the BLM even before the wilderness review mandated by FLPMA. In recognition of their special values, a portion of the Kelso Dunes was included in the Eastern Mojave Recreation Lands designation. The dunes have also been designated as an Outstanding Natural Area and were withdrawn from mineral entry in 1972 to protect public and recreational values. They were closed to motorized vehicle use in 1973. Current review indicates that the special qualities of this area are worthy of ACEC status and management.

Management actions prescribed for the entire Scenic Area by the EMNSA Plan will also be applicable to the Kelso Dunes (see Amendment Seven). Special actions prescribed for the dunes include maintaining the mineral withdrawal and the motorized vehicle closure. This area would also continue to be protected in accordance with the Interim Management Policy for Lands Under Wilderness Review (IMP).

Alternative B: No Action

Do not designate an ACEC. Present management as an ONA under the guidelines of the East Mojave National Scenic Area Plan and the IMP and continuation of the vehicle closure and mineral withdrawal will adequately protect the outstanding values of this area. If Congress should not designate the area as wilderness, the Bureau would immediately reconsider ACEC status.

AMENDMENT ELEVEN
DESIGNATE THE TURTLE MOUNTAINS NNL AN NNL/ACEC

Alternative A: Preferred

Designate an ACEC in the Turtle Mountains. The proposed ACEC would occupy the same area (approximately 44,160 acres) as the vehicle closure which was established in 1976 to protect the fragile and unique environment (Appendix A, Map 11). The boundaries would encompass the central core of the Turtle Mountains, including the Mopah Springs ACEC (No. 75). This entire area is within the portion of WSA 307 which the CDCA Plan has recommended as suitable for wilderness designation. The northern portion of the ACEC contains some of the most colorful and distinctive volcanic formations in the California Desert, while Mopah Spring is acknowledged for its wildlife and cultural resource values. A management plan would be prepared for the entire ACEC. The existing Mopah Springs ACEC would be incorporated into the new ACEC.

Management actions would include those already established for the Mopah Springs ACEC and the following additional measures. (1) Maintain the vehicle closure by periodic ranger patrol and BLM staff observations. (2) Continue to enforce and monitor the road closure into the Mopah Springs ACEC, as directed by the ACEC Plan (1982). (3) Maintain the four-wheel drive Turtle Mountain Road which forms the northern boundary of the proposed ACEC. This route is part of the East Mojave Heritage Trail and would be maintained for this purpose. (4) Continue education of trail users on desert etiquette and desert tortoise protection. (5) Continue to protect the area in accordance with the IMP until Congress decides on wilderness designation.

Alternative B: No Action

Do not designate an ACEC. Protection of the area's special resources will be accomplished by continuing vehicle closure and applying the guidelines of BLM's Interim Management Policy for Lands Under Wilderness Review. The Mopah Springs ACEC will continue. All of the management actions listed for Alternative A will be applied. If the area of the proposed ACEC is not designated by Congress as wilderness, the Bureau will immediately reconsider ACEC designation.

AMENDMENT TWELVE
DESIGNATE THE DESERT LILY PRESERVE (NA) AN ACEC

Alternative A: Preferred

Designate the 2,040-acre Desert Lily Preserve (Natural Area) an ACEC. The site is approximately 10 miles northeast of Desert Center and just east of Highway 177 (Appendix A, Map 12). It has been the subject of public interest and concern for many years because of its outstanding floral displays when winter rains are plentiful. The Preserve was dedicated in 1968, and the site was designated as part of the National Recreation Lands System in 1972. This designation carried with it a withdrawal from all forms of appropriation including mineral entry. In 1975, a fence was built around the major portion of the site on the east side of Highway 177 to protect the sensitive resources from off-road activity. This fence would remain with or without ACEC designation, as would the withdrawal from mineral entry. Management of the ACEC would include continuation of the mineral withdrawal, monitoring of the status of the unique resources at this location, and continued protection through fencing. An ACEC management plan would be developed for this location.

Alternative B: No Action

Do not designate an ACEC. Continue to manage as a Naturasl Area in the manner described above.

AMENDMENT THIRTEEN
DESIGNATE A PORTION OF THE IMPERIAL DUNES NNL AN NNL/ACEC

Alternative A: Preferred

Designate ACEC status for the 27,767-acre portion of the Imperial Dunes which has the same boundaries as the portion of Wilderness Study Area CDCA-360 which the CDCA Plan recommended as suitable for wilderness designation. The area is bordered on the south by Highway 78, on the west by the new Coachella Canal, on the east by the Southern Pacific Railroad and the Niland-Glamis Road, and on the north by Mammoth Wash (Appendix A, Map 13).

Portions of the dunes have been designated an Outstanding Natural Area (ONA), a Research Natural Area (RNA), and a National Natural Landmark (NNL). The first two designations will be dropped and the NNL status retained. This portion of the dune system was closed to vehicles in the 1970s in order to protect essential habitats for plant species endemic to the dunes. The Imperial Dunes Recreation Area Management Plan (RAMP) of 1987 continued this vehicle closure. In addition to the goal of aggressively enforcing the closure, the plan set forth the objectives to (1) enhance nonmotorized recreation opportunities, (2) protect wilderness suitability in accordance with BLM's Interim Management Policy for Lands Under Wilderness Review, and (3) monitor and protect the integrity of plant and wildlife habitat. No additional management actions would be required for the ACEC.

Alternative B: No Action

Do not designate an ACEC. Present management (as a NNL, ONA, and RNA, where applicable) according to the Imperial Dunes Recreation Area Management Plan and the Interim Management

Policy for Lands Under Wilderness Review and continuation of vehicle closure will adequately protect the area. If Congress should not designate this area as wilderness, the Bureau would immediately reconsider an ACEC designation.

AMENDMENT FOURTEEN
CHANGE MUC OF TWO PARCELS IN PIPES CANYON WATERSHED FROM "L" TO UNCLASSIFIED

Alternative A: Preferred

Change the multiple-use class of two parcels in the Pipes Canyon watershed (approximately 480 acres) from "L" to unclassified (Appendix A, Map 14). Transfer of the administration of the public lands in the Morongo Basin watershed from the Barstow Resource Area to the Palm Springs-South Coast Resource Area will leave these two parcels isolated within the Pipes Canyon watershed. The remaining lands in the south half of Pipes Canyon are private or scattered unclassified parcels. This change in classification would make these parcels available for sale or exchange and would be consistent with the long term management of this area.

Alternative B: No Action

Allow the land use designation to remain MUC "L," and continue to manage these small parcels according to Class "L" guidelines.

AMENDMENT FIFTEEN
CHANGE MUC OF 10.5 SECTIONS IN ARROYO SALADA OPEN AREA FROM "I" TO "M"

Alternative A: Preferred

Change the MUC class of approximately 8.5 sections in the Arroyo Salada Open Area from "I" to "M" for transfer to the State of California. Two additional sections now classified as "I" would be changed to Class "M" for consistency with surrounding lands (Appendix A, Map 15). An Environmental Assessment would be prepared at the time of application for an R & PP permit on all or part of this land to address environmental issues.

The California Department of Parks and Recreation wants to acquire this area for addition to the adjacent Ocotillo Wells State Vehicular Recreation Area (SVRA). The Parks Department intends to apply through the Recreation and Public Purposes Act. The area consists of scattered sections of private and public land. The State has acquired much of the private land and wants the authority to manage the remaining public land.

The BLM's El Centro Resource Area has been managing this land as an OHV Open Area, Class "I" (Intensive Use). According to guidelines of the CDCA Plan, only lands classified as MUC "M" or "unclassified" may be disposed of. In order to facilitate transfer of the Arroyo Salada land to State Parks, 6,840 acres of Class "I" land must be changed to Class "M". This amendment would make that class change. Adjacent land to the north (2,560 acres), which the State also wishes to acquire, is already Class "M" and is not part of this amendment. Two sections just east of the State Parks acquisition area would also be changed from Class "I" to Class "M" for consistency with the surrounding Class "M" lands.

Alternative B: No Action

Leave the land under its current designation and continue to manage the Arroyo Salada area as an open OHV area.

AMENDMENT SIXTEEN
EL MIRAGE: CHANGE MUC AND VEHICLE ACCESS

Alternative A: Preferred

In order to implement the El Mirage Cooperative Management Area Plan (August 1990), make the following adjustments in land use and motorized vehicle access (Appendix A, Map 16). (1) Change the multiple-use class (MUC) of approximately 11,000 acres of public lands within the Management Area from "unclassified" to Class "I" (Intensive Use). (2) Change motorized vehicle access in the Management Area from "undesignated" to "open," except for the public land on the lake bed (1,280 acres) which is already classified as "open." (3) As private land within the Management Area is acquired (approximately 12,000 acres), designate it as Class "I" and "open." (4) Outside of the Management Area there are approximately 9,000 acres of scattered tracts of unclassified public lands. Change 5,800 acres to MUC "M", with the intent of maintaining them as public land. Leave the remaining 3,200 acres "unclassified" and available for disposal. Change motorized vehicle access on these scattered lands from undesignated to "limited." (Acreages listed in this description are approximate).

Alternative B: No Action

Maintain the existing multiple-use class and motorized vehicle access designations. BLM would continue attempting to manage the conflicts between landowners and recreationists. Under this alternative, the El Mirage Cooperative Area Management Plan would not be implemented.

AMENDMENT SEVENTEEN
DELETE PALEN EPHEMERAL GRAZING ALLOTMENT

Alternative A: Preferred

Delete the Palen Ephemeral Grazing Allotment from the Livestock Element of the CDCA Plan. The Palen Allotment is located 14 miles northeast of Desert Center. The 50,500-acre allotment, which straddles Highway 177, is adjacent to the Palen Mountains on the southeast, the Granite Mountains on the east, and the Colorado River Aqueduct on the west (Appendix A, Map 17).

When initially proposed, the Palen Allotment contained 66,500 acres. Prior to completion of the CDCA Plan, 16,000 acres were removed to insure that there would be no domestic sheep grazing within the area designated by the California Department of Fish and Game for potential use by bighorn sheep. This withdrawal, however, did not take into account the possibility that following reintroduction, the bighorn would explore and move between the Palen and Granite Mountains or across Highway 177 into the Coxcomb Mountains.

Recent studies (Bunch et al., 1988, DeForge et al., 1988, and Jessup et al., 1988) have indicated that bighorn sheep are highly susceptible to pathogenic organisms carried by domestic sheep. This amendment was proposed to protect bighorn sheep which may be introduced into the Palen and Granite Mountains from potential infection with diseases carried by domestic sheep.

Alternative B: No Action

Do not delete the allotment.

AMENDMENT EIGHTEEN
DELETE RICE VALLEY EPHEMERAL GRAZING ALLOTMENT

Alternative A:

Delete the Rice Valley Ephemeral Grazing Allotment from the Livestock Element of the CDCA Plan. The 37,800-acre allotment is located south of Highway 62 at Rice, California. It extends south from Rice to the Big Maria Mountains on the southeast and the Little Maria Mountains on the southwest. The southern boundary is approximately 13 miles northwest of Blythe, California (Appendix A, Map 18).

When initially proposed, the Rice Valley Allotment covered 40,000 acres. Prior to completion of the CDCA Plan, 2,200 acres were removed to insure that there would be no domestic sheep grazing within the area designated by the California Department of Fish and Game for potential use by bighorn sheep. However, this reduction did not consider the potentiality that after reintroduction, the bighorn would explore and move between the Big Maria and the Little Maria Mountains, possibly being exposed to domestic sheep.

Recent studies (Bunch et al., 1988, DeForge et al., 1988, and Jessup et al., 1988) have indicated that bighorn sheep are highly susceptible to pathogenic organisms carried by domestic sheep. Closure of the Rice Valley Allotment to grazing has been proposed to protect bighorn which may be introduced into the Big Maria and Little Maria Mountains from potential infection with diseases carried by domestic sheep. However, grazing also occurs on private lands south of the allotment.

Alternative B: Preferred - No Action

Do not delete the Rice Valley Allotment. Continued grazing on private lands south of the allotment would endanger desert bighorn sheep and would cancel the benefits of prohibiting grazing in the Rice Valley Allotment.

AMENDMENT NINETEEN
DELINEATE THREE CATEGORIES FOR DESERT TORTOISE MANAGEMENT

Alternative A: Preferred

In November 1988 the Bureau Director signed the document titled "Desert Tortoise Habitat Management on the Public Lands: a Rangewide Plan" (Spang et al. 1988). This Rangewide Plan

directed District Managers to delineate tortoise habitat areas using three management categories. This amendment implements that directive. Under this alternative, 2,227,000 acres would be established as Category I, 461,000 acres as Category II, and 1,529,000 acres as Category III. The proposed amendment would merely establish the categories and their boundaries. It would not impose any management constraints or resource uses on activities for the different categories. Any such management constraints would require public review.

The goals and criteria for the three Management Categories (I, II, and III) are shown in Table 2-1. Map 19A (Appendix A) shows the proposed delineation of the Management Categories within the CDCA. Table 2-2 shows the distribution of Management Categories among land administrations in the CDCA. Categories are assigned to public land only; intermingled private and State lands are not affected. Some areas (e.g., dry lake beds, lava flows, mountain peaks) within the management categories are not habitat for tortoises. These areas are not to be treated as habitat even though they are shown within a management category. Due to map scale, only a few large mountain ranges, towns, etc. are shown as exclusions.

TABLE 2-1

Goals and Criteria for Desert Tortoise Management Categories

Item	Category I	Category II	Category III
Goal	Maintain stable, viable populations and increase populations where possible.	Maintain stable, viable populations.	Limit declines to the extent possible using mitigation measures.
Criterion 1	Essential to maintenance of large, viable populations.	May be essential to maintenance of viable population.	Not essential to maintenance of viable populations.
Criterion 2	Conflicts resolvable. Land ownership patterns favor tortoise maintenance and no commitment to major land use conflict.	Conflicts difficult to resolve at this time. Land ownership patterns do not favor tortoise maintenance.	Conflicts not resolvable. Land use commitments to major conflicting use; some mitigation may be possible.
Criterion 3	Medium to high density or low density contiguous with medium or high density.	Medium to high density or low density contiguous with medium or high density.	Low to medium density not contiguous with medium or high density.
Criterion 4	Increasing, stable, or decreasing population.	Stable or decreasing population.	Stable or decreasing population.

The criteria used to categorize tortoise habitats include the following: (1) importance of the habitat to maintaining viable populations, (2) resolvability of conflicts, (3) tortoise density, and (4) population status (stable, increasing, decreasing). Information concerning all of these criteria may not be available or relevant for all categorizations.

Tortoise habitat was found to be concentrated in four population areas of the California Desert: the West Mojave, the Ivanpah-Kelso-Shadow, the Fenner-Chemehuevi, and the Chuckwalla areas; all of these were judged to contain habitat "essential to maintenance of large, viable populations" (Criterion 1). These areas are similar to the major crucial habitat areas in the CDCA Plan.

Off-highway vehicle open areas were judged to be an "irresolvable conflict" with maintenance of a stable, viable tortoise population (Criterion 2). In areas where the Bureau manages only scattered lands, it was judged that private land uses would create an "irresolvable conflict." For the Barstow-Victorville-Kramer area, the proposed Land Tenure Adjustment Project was used to determine where acquisitions and disposals might serve to resolve some private land conflicts.

For most of the desert, the density map from Berry et al. (1984) was used to estimate tortoise density (Criterion 3). This map was generated primarily from transect and plot data gathered in the late 1970's. Although current populations are reduced from these inventory levels, the potential and relative densities are generally still valid. Tortoise habitat with densities below 20 per square mile are not shown on this map and are not precisely known. For the area between Interstate 40 and Fort Irwin, USFWS surveys in 1988 were used. Elevation, steepness of terrain, and personal knowledge of staff biologists were used to estimate the outer boundary of tortoise range. The resulting depiction of the category boundaries may exclude some occupied habitat; if such areas are found, they are automatically inside Category III, the lowest category. In other words, Category III habitat includes all other public lands where tortoises occur. Since the limits of the distribution of the tortoise are not precisely known, the boundary for Category III is an approximation of tortoise habitat. The map also shows the known distribution of tortoises within other Federal jurisdictions (i.e., military bases and national monuments); these lands are not categorized by this amendment.

Criterion 4, dealing with population status, had little influence on the categorization.

Distribution of tortoise habitat among the three management categories on BLM land in the four population areas (West Mojave, Ivanpah-Shadow-Kelso, Fenner-Chemehuevi, and Chuckwalla) is shown in Table 2-3.

The delineation of categories was developed by wildlife biologists in the Desert District and Resource Area Offices. The categories were applied using the criteria in the Rangewide Plan (Table 1) based on data in District files, personal knowledge of the staff, and professional judgement. The categories were reviewed by staff at the Department of Fish and Game and the U.S. Fish and Wildlife Service (USFWS).

On February 22, 1989, the California Desert District Manager assigned categories on an interim basis (Instruction Memorandum No. CDD-89-51). The Interim Map which has been in use since that time is very similar to Map 19A.

Preparation of Habitat Management Plans (HMP) for the four population areas (West Mojave, Ivanpah-Kelso-Shadow, Fenner-Chemehuevi, and Chuckwalla) is underway or scheduled during the next five years. Management prescriptions for each area will be developed through these HMPs and will be subject to public review through the CDCA Plan amendment process.

TABLE 2-2

DISTRIBUTION OF TORTOISE MANAGEMENT CATEGORIES
AMONG LAND ADMINISTRATIONS IN CDCA

OWNERSHIP	CATEGORY I acres (000)	% Cat I	CATEGORY II acres (000)	% Cat II	CATEGORY III acres (000)	% Cat III	OTHER FEDERAL acres (000)	% Cat OTHR FED	TOTAL acres (000)	% all Cats
Private	700	23	141	23	1,498	49	0	0	2,339	30
State	80	3	13	2	45	1	0	0	138	2
Bureau	2,227	74	461	75	1,529	50	0	0	4,217	53
Military	0	0	0	0	0	0	1,048	86	1,048	13
Natl. Mon.	0	0	0	0	0	0	165	14	165	2
TOTAL	3,008	100	615	100	3,072	100	1,213	100	7,907	100
Percent of total	38%		8%		39%		15%			

TABLE 2-3

DISTRIBUTION OF BLM TORTOISE HABITAT AMONG
THREE MANAGEMENT CATEGORIES IN FOUR POPULATION AREAS

BLM Category	West Mojave acres (000)	%	Ivanpah-Shadow-Kelso acres (000)	%	Fenner-Chemehuevi acres (000)	%	Chuckwalla acres (000)	%	ALL AREAS acres (000)	%
I	556	33	441	77	924	80	306	38	2,227	53
II	217	13	29	5	175	15	40	5	461	11
III	906	54	101	18	55	5	467	57	1,529	36
ALL BLM	1,679	100	571	100	1,154	100	813	100	4,217	100

Alternative B: No Action

Delineate the desert tortoise "crucial habitat" shown on Map 4 of the CDCA Plan as Category I and all other tortoise habitat on public land as Category III (see Appendix A, Map 19B). This delineation would retain the same management areas given in the CDCA Plan, while complying with the directive of the Rangewide Plan which states that all tortoise habitat must be assigned to the defined Habitat Categories. "Crucial habitat" includes areas which are essential to the continued existence of the species; this corresponds closely to Criterion 1 for Category I, i.e., "Habitat area essential to maintenance of large, viable populations."

CHAPTER 3
AFFECTED ENVIRONMENT

CHAPTER 3

AFFECTED ENVIRONMENT

INTRODUCTION

The affected environment refers to the area which may be impacted by a proposed amendment. This chapter describes the affected environment for each amendment. Additionally, information on the amendment areas can be found in several other publications. These include the following:

- The California Desert Conservation Area Plan (including overlays), 1980.
- The appendices for the Final Environmental Impact Statement and Proposed Plan, CDCA, September 1980.
- The East Mojave National Scenic Area Plan, 1988.
- The Final Management Plan and Environmental Assessment for Amboy Crater NNL, 1986.
- The Imperial Sand Dunes Recreation Management Plan, 1987.
- The Black Mountain Cultural Area ACEC Management Plan, 1988.
- The Mopah Spring ACEC Management Plan, 1982.
- The Edom Hill/Willow Hole ACEC Management Plan, 1986.
- Management Plan for the El Mirage Cooperative Management Area, August 1990.
- Coachella Valley Preserve System Management Plan, 1986.

AMENDMENT ONE
DESIGNATE AN ACEC AT LAKE MANIX

Background

The proposed Manix ACEC contains a rich vertebrate fauna and is described by Jefferson (1982) as "perhaps the most important late Pleistocene paleontologic and archaeologic research area of Southern California." The study of these resources is important for interpretation of past climatic conditions and the paleo-environment.

Within this region, approximately 25 miles east of Barstow, are more than 120 feet of exposed lake and river sediments of the Manix Formation. The sediments presently exposed along the Mojave River and eroded to form a "badland topography" were deposited in Lake Manix, an ancestral body of water which existed for almost 500,000 years (Jefferson, 1985). Covering an area of more than 250 square miles, Lake Manix supported a highly diverse fauna, which included many species now

extinct (Jefferson, 1979). The list includes ground sloths, mammoths, bears, camels, llamas, and bison, plus dozens of bird species and fresh water invertebrates (Jefferson, 1985). Evidence of past life is abundant and is preserved as fossil bones, teeth, and shell material.

About 14,000 years ago, the eastern margin of Lake Manix was suddenly breached, causing the entire lake to drain eastward, carving Afton Canyon (Meek, 1989).

Paleontology

The paleontological resources of this area are nonrenewable and invaluable for research and education. The region contains a succession of fossils that could span the Irvingtonian and Rancholabrean Land Mammal Age. The age of the fossil-bearing sediments within the Manix-Afton Canyon region ranges from over one million years to 19,000 years. One of the earliest paleontological studies of these Pleistocene beds was published by Buwalda in 1914. Since that time, numerous articles have appeared in various scientific publications.

Cultural Resources

The archaeological record for both early and late prehistoric eras suggests that the area's natural resources were utilized by a number of cultural groups. The ethnographic records suggest that the area was under the nominal control of the Vanyume Serrano. Other groups that may have used the area include the Desert Chemehuevi, Mohave, Kitanemuk, Cahuilla, and Panamint Shoshone. These groups would have exploited the natural resources of the area as they traveled through on established trails.

No systematic inventory work has been undertaken. Twenty-two archaeological sites have been recorded, with the majority being lithic flake scatters and reduction stations. Other sites within the area include a temporary campsite and a food processing site. The lithic workshops indicate a long period of lithic exploitation and utilization in the Manix Lake area. The habitation site dates to the Late Prehistoric era and contains a number of artifact types.

In the Historic Era, this region was first traversed by Friar Francisco Garces in 1776. The Indian trail along the Mojave River that Fr. Garces followed was known by several names, including the Old Spanish Trail, the Fort Mojave Road, and the Government Road. Except for the Old Spanish Trail, no recorded historic resources are present within the area of the proposed ACEC.

Vegetation

Vegetation in the proposed ACEC is typical of the Mojave Desert, and consists primarily of creosote bush scrub. The dominant plant species are creosote (Larrea-tridentata) and burro bush (Ambrosia-dumosa). Riparian vegetation, composed primarily of tamarisk, exists in limited amounts near the intersection of the Mojave River and Manix Wash. No state or Federally listed plant species are known to occur here.

Wildlife

Wildlife habitat in this area is not of exceptional value. Species are typical of the Mojave Desert and include jackrabbits, various species of lizards and snakes, and birds. The California Desert Plan inventory, 1978-79, did not document any desert tortoises in this area, nor are any other threatened or endangered wildlife species known to occur within the proposed ACEC.

Recreation

Recreational use consists primarily of vehicular traffic along the Mojave Road, which passes through the area.

Livestock Grazing

The proposed ACEC is within the Cady Mountain ephemeral/perennial allotment. The current lessee has a year-long cow/calf operation. The Cady Mountain Allotment Management Plan was signed in 1983.

Socio-Economic, Lands

The proposed ACEC (Alternative A) contains 5,600 acres; 70 per cent (3,900 acres) is public land and 30 percent (1,700 acres) is private land (Appendix A, Map 1). These lands are designated by the CDCA Plan as Class M, moderate use.

In Alternative B, the ACEC would encompass 3,900 acres, all of which would be public land. In Alternative C, the ACEC would include only 2,950 acres of public land.

The San Bernardino County General Plan (1979) designates the proposed ACEC area as RCN (Rural Conservation). Rural Conservation lands include a wide variety of publicly and privately owned land which, because of its location, access limitations, natural resources, or scenic qualities, is suitable for low intensity uses and limited human habitation.

Geology-Energy-Minerals

Mineral potential for the area is low for sodium, potassium, oil and gas. No known production of sand and gravel exists within the area.

Important tuff (volcanic ash) and tufa (thermal spring carbonate) deposits occur here. These deposits have been studied to determine, through radiometric age-dating techniques, the relative and absolute age of fossil material and to better define the geologic environment in which Manix Lake existed.

Utility Corridors

Utility Corridor BB (the I-15 Corridor) crosses approximately 1,120 acres in the northwest portion of the proposed ACEC (Alternative A).

AMENDMENT TWO
ENLARGE BLACK MOUNTAIN CULTURAL AREA ACEC (No. 35)

Cultural Resources

Cultural resources within the existing and proposed ACEC include some of the finest and most extensive assemblages of prehistoric rock carvings, or petroglyphs, within the CDCA. These resources, which are found on the abundant basalt outcrops and canyon walls throughout the proposed ACEC, have been recorded and studied by archaeologists and art historians since the

beginning of the 20th Century (Momyer, 1937; ASA, 1953; Curtis, 1955; Gros, 1956; San Bernardino County Museum, 1956; Grant, 1971; Heizer and Clewlow, 1973; Dibble, 1990). More than 9,000 individual petroglyphs have been recorded (Turner, 1978), underscoring the temporal depth and diversity of past human uses of the area.

In addition to petroglyphs, the area contains lithic workshops where raw materials were available for the manufacture of prehistoric stone tools (Simpson 1961), locations suitable for surface occupation sites and rock shelters (Howe 1956), locations for game hunting and plant food collection, and rock alignments probably associated with ritualistic activities (Brown 1979). Within the western portion of the ACEC, through Black Canyon, there was a major transportation corridor used by the prehistoric peoples. This travel corridor remained important from the prehistoric era through the late nineteenth century, when it was used to connect the Panamint City mining region north of the ACEC to the commercial centers of southern California (von Till Warren and Roske 1981). Other early historic uses of the area include opal mining at Scouts Cove, and possibly limited cattle grazing associated with the Black Ranch through the early 20th century.

Recreation

The proposed ACEC is a popular primitive recreation area within the Barstow Resource Area. Three prominent landscape features dominate the landscape - Black Canyon, Black Mountain, and Opal Mountain. Basalt-covered hills, small canyons, low-lying lava flows, and rock encrusted desert pavement characterize the terrain. Historically, the area has been a popular location for rockhounding and for sightseers to view the many rock art sites. The area is one of the best known rock-hounding and collecting areas in the Mojave Desert and is listed in Strong's Desert Gem Trails guidebook. Other recreational uses of the area include camping, target shooting, and chukar, quail, and rabbit hunting.

Past recreational use of the area has resulted in damage to cultural resources which could have been avoided, and this effect continues. The types of injury include defacement of petroglyphs, shooting damage, graffiti, lava collection, theft of petroglyphs and other types of prehistoric cultural artifacts, and the proliferation of unauthorized roads through surface scatter sites.

Vegetation

The dominant species throughout the area are creosote (Larrea tridentata) and burrobush (Ambrosia dumosa). Galleta grass (Hilaria rigida), Mojave saltbush (Atriplex spinifera), and cheesebush (Hymenoclea salsola) also occur in some areas. No known state or Federally listed plant species or their critical habitat are found here. However, there is a high probability that the Barstow Wooly Sunflower (Eriophyllum mojavensis), a species which is being considered for listing by the U.S. Fish and Wildlife Service, may be within the proposed ACEC.

Wildlife

The proposed ACEC contains a typical array of upland desert fauna and falls within Management Category I for the desert tortoise, a Federally and State-listed threatened species. It also contains the State-listed Mohave ground squirrel. The steep-walled canyons and mountains in the area provide suitable nesting habitat for raptors, as shown by the presence of a golden eagle nest in Black Canyon and a prairie falcon nest on Opal Mountain. A number of water guzzlers have been constructed within portions of the existing ACEC to increase the population of upland game animals that inhabit the area.

Wilderness

Black Mountain Wilderness Study Area (CDCA 186C) is located within the boundaries of the enlarged ACEC. The CDCA Plan recommended this WSA nonsuitable for wilderness designation.

Geology-Energy-Minerals

Mineral potential within the enlarged ACEC includes occurrences of uranium (or thorium), perlite, zeolite, pumicite, opal, and chalcedony (e.g., agate, jasper, etc.). As of January 13, 1988, there were 763 mining claims filed within and immediately adjacent to the ACEC. In recent years the area has been tested for borates, zeolites, and perlite; building stone has been extracted from the eastern portion of the area. On the southeast slope of Opal Mountain a mining company has filed a bulk sampling assessment program for zeolite mining. The potential for development of mineral resources within the planning area ranges from high to unknown.

No known energy resources are present within the enlarged ACEC.

AMENDMENT THREE
COACHELLA VALLEY FRINGE-TOED LIZARD RNA/ACEC

Lands

Edom Hill-Willow Hole. This area was designated an ACEC in 1985 to provide protection for the Coachella Valley Fringe-Toed Lizard (CVFTL), the Least Bell's Vireo, two Federal candidate plant species, archaeological resources, and cultural values.

Coachella Valley Preserve (CVP). In 1989, the BLM accepted title to lands located north of Ramon Road as partial fulfillment of a Cooperative Agreement between the BLM and The Nature Conservancy (TNC). These lands, in conjunction with a portion of lands identified in the Desert Plan as a Research Natural Area, are crucial to the successful maintenance of the CVP System. This area is recognized in the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan (HCP), in MOUs between TNC and BLM, and in an implementing agreement among BLM, TNC, USFWS, and the California Department of Fish and Game.
Whitewater Floodplain (Indian Avenue) Preserve. The BLM manages this land for protection of the CVFTL in consultation with the USFWS and the Coachella Valley Water District.

Vegetation

The proposed areas of the RNA/ACEC include several documented sites for two species of rare plants, "Coachella Valley Milk-vetch" (Astragalus lentiginosus var. coachellae) and "Little San Bernardino Mountain Linanthus" (Linanthus maculatus). These two plants are currently candidates (i.e., under status review) for possible Federal and State listing. Both species are recognized as sensitive by the BLM.

The proposed RNA/ACEC boundaries also encompass groves of native California fan palms (Washingtonia filifera). Native fan palm oases are considered unusual plant assemblages in the California Desert by the BLM.

Several stands of tamarisk, or salt cedar, are found in the area. They pose a serious threat to the naturalness of the native palm ecosystem, and their removal is a high priority. Russian thistle is another exotic plant species which is invasive in the blow sand habitats that are critical for the CVFTL. Biological, chemical, or manual removal of this plant may be proposed if monitoring shows it is necessary.

Wildlife

The proposed RNA/ACEC encompasses approximately 10,000 acres of public land in and around the Indio Hills - 1,766 acres at Edom Hill-Willow Hole, 1,230 acres at Whitewater Floodplain, and 7,000 acres at the Coachella Valley Preserve (CVP). These areas of windblown sand provide the best remaining habitat on public land for the Coachella Valley Fringe-Toed Lizard (CVFTL) (Uma inornata), which is Federally listed as "threatened" and State-listed as "endangered." Other sensitive wildlife include the Least Bell's Vireo, a Federally and State-listed endangered bird which has been recorded regularly at Willow Hole, the Coachella Valley round-tailed ground squirrel (Spermophilus tereticaudus chlorus), and the flat-tailed horned lizard (Phrymosoma m'callii), a category 1 candidate for Federal listing.

Recreation

Recreational activities in the Preserve area are numerous, ranging from day hiking to horseback riding, nature study outings, and picnicking. In 1990, the BLM, in consultation with the USFWS, agreed to permit limited equestrian and hiking trails to link the northern part of the Preserve with the rest of the Preserve north of Ramon Road. The Coachella Valley Preserve System Management Plan identifies this type of recreation as a way to increase public support for preservation goals as long as the primary goal of protecting flora and fauna is not compromised. Motorized vehicle use is not allowed on these trails.

Off-highway vehicle (OHV) use is not permitted in the CVP or in the Indian Avenue Preserve, which is fenced off. However, earlier OHV use in the northern portion of the CVP and throughout the area created hillside scarring. In addition, trespass by OHVs on the CVP's aeolian sand habitats is currently a serious threat to the integrity of the area.

Cultural Resources

Coachella Valley Preserve: Inventory for cultural resources in the area of the proposed ACEC expansion is incomplete. However, there are various archaeological sites with potential significance known to occur within a one-mile radius of the palm oasis. Potential outside this radius is low to moderate.

Edom Hill-Willow Hole: Several important archaeological sites, primarily seasonal camps associated with the mesquite thickets, exist surrounding the spring and mesquite thickets of Willow Hole. No archaeological sites have been found at Edom Hill, but the hill is considered sacred to the Agua Caliente Band of Cahuilla Indians.

AMENDMENT FOUR
DELETE HALLORAN WASH ACEC (N0.29)

Cultural Resources

This area was originally nominated as an ACEC for protection of cultural resources. These resources were later found to be located on adjacent privately owned land. In the 1982 amendment process, the boundary of the ACEC was expanded to include petroglyphs. A recent on-site examination showed that the petroglyphs are outside the ACEC boundary. In addition, monitoring of the ACEC over the last several years has revealed that the cultural resources within the ACEC boundary are not subject to adverse effects.

Vegetation

No rare, threatened, or endangered species, or BLM sensitive plants occur in this area.

Wildlife

The ACEC lies within Management Category I of the Ivanpah-Shadow-Kelso desert tortoise population area. Average tortoise densities are estimated to be below 50 per square mile. Tortoise habitat management will be addressed in the Ivanpah-Shadow-Kelso Habitat Management Plan.

AMENDMENT FIVE
DESIGNATE AMBOY CRATER AN NNL/ACEC

Geology-Energy-Minerals

The Amboy Crater is a recent and very symmetrical volcanic cinder cone, breached on one side where basaltic lava poured out over a vast area. The inside of the 250 foot high crater contains two lava dams behind which two small lava "lakes" have formed. Trails follow the rim and have been used extensively. Outside the crater, the lava field contains such features as lava lakes, collapsed lava tubes and sinks, spatter cones, and massive flows of basalt. The crater is in good condition, since no vehicle access is available, and foot traffic generally stays on existing trails.

There has been no mining in the immediate crater area, nor are there plans for mining the Amboy basalt. A plan of operations was prepared for gold mining in a near-by location of Amboy tertiary basalt flows, but the plan has not been acted on. A management plan for the crater (1986) proposed a withdrawal from mineral entry as a protection for its unique resources (Amboy Crater NNL Plan). About eight miles east of the crater, the National Chloride Company and the Leslie Salt Company recover salt and calcium chloride brine from Bristol Dry Lake, while a small gypsite mine is located about five miles to the southeast. Except for these operations, there is no active mining within 50 miles of the crater.

Wildlife/Vegetation

No rare, threatened, or endangered species, or BLM sensitive plants occur in this area.

Recreation

Due to its high visibility and scenic and geologic interest, Amboy Crater attracts the visiting public in increasing numbers. The crater is inaccessible by most vehicles due to the absence of roads and rough terrain. However, 4-wheel drive vehicles and motorized trail bikes have created visual scars in the area surrounding the base of the cinder cone and on the cone, itself. This use is no longer permitted. Visitors hiking into the crater have worn a well-defined erosional scar on the cone's north face. The BLM's NNL Plan calls for construction of a recreation site outside the NNL/ACEC for picnicking, observation, and interpretation. No vehicle access will be allowed inside the ACEC.

Wilderness

Except for its northeast quadrant, the proposed Amboy Crater ACEC lies within Amboy Crater WSA (CDCA 304A), which the CDCA Plan recommended nonsuitable for wilderness designation. Vehicle access and proposed visitor facilities would be adjacent to the northeast portion of the ACEC and would not intrude into the WSA.

AMENDMENT SIX
DESIGNATE BIGELOW CHOLLA AREA AN RNA/ACEC

Vegetation

The proposed RNA/ACEC is within the Sacramento/Stepladder Mountains Teddy Bear or Bigelow Cholla (Opuntia bigelovii) Unusual Plant Assemblage. This 80-acre location contains the northern-most population and the densest known concentration of this plant in the CDCA. This plant is a common representative of the Sonoran Desert, of which the Colorado Desert is a subdivision. Other vegetation in the area includes the creosote bush (Larrea tridentata), burro bush (Ambrosia dumosa), several species of Opuntia (O. echinocarpa and O. ramosissima), and the Mojave yucca (Yucca schidigera). No rare, threatened, or endangered species or BLM sensitive plants are known to occur in the area.

Wildlife

The proposed ACEC lies within the Fenner-Chemehuevi desert tortoise population area. This area is in Management Category I, with a relatively stable tortoise population of 50-100 per square mile. The desert tortoise is Federally and State-listed as threatened. Tortoise habitat management will be addressed in the Fenner-Chemehuevi Habitat Management Plan.

Wilderness

The southern half of the proposed ACEC lies within the Bigelow Cholla Garden WSA (CDCA-290) which the CDCA Plan recommended nonsuitable for wilderness designation.

Recreation

The proposed ACEC is located on both sides of Interstate 40, so that this outstanding garden of Bigelow Cholla is easily viewed by passing motorists. Viewing and photographing the cholla is the

major type of recreation in this area. The area is primarily roadless, and is seldom entered by vehicles.

Lands

The University of California owns a section of land adjacent to the proposed RNA/ACEC (Section 21, T9N, R20E) which is part of its Natural Reserve System. The University wishes to study and preserve the outstanding vegetation in this area.

Geology-Energy-Minerals

The area of the proposed ACEC was withdrawn from mineral entry in 1972.

AMENDMENT SEVEN
DESIGNATE CIMA DOME (ONA) AN ONA/ACEC

Geology-Energy-Minerals

Unlike the nearby cinder cones, Cima Dome is not of volcanic origin. It was once a large mass of molten rock which, as it cooled, became quartz monzonite, a rock similar to granite. Quartz monzonite differs from other types of granite in that it erodes and weathers rapidly and uniformly, allowing the formation of a large, low, convex mass. A few outcroppings of the original bedrock are found on the surface, the largest of which is Teutonia Peak. The dome covers approximately 70 square miles and can be seen from as far away as Kingston Pass.

The 18,620-acre ONA was withdrawn from mineral entry under the mining laws in 1972, but not the mineral leasing laws pursuant to Section 204 of FLPMA. The EMNSA Management Plan recommends adding 320 additional acres at Wildcat Butte to the withdrawal.

The dome contains no active mines. The Teutonia Mine area, located about two miles northeast of the dome's peak, produced minor quantities of silver and lead from a 5 foot-wide vein in the quartz monzonite. This location, the northeast flank of the dome, is considered to have a moderate potential for lead, silver, copper, and zinc. Thirteen claims have been filed in this area.

Vegetation

The proposed ACEC contains one of the most extensive Joshua tree (Yucca brevifolia) forests in the CDCA; most of this woodland is within the 18,620-acre mineral withdrawal. The 70 square-mile granite dome has a diverse plant community which provides unique opportunities for research, photography, and casual botanical study. Vegetation is composed of widely scattered shrubs, grasses, and cacti. The dominant shrubs are creosote (L. tridentata) and burrobush (Ambrosia dumosa), with Mojave yucca (Yucca schidigera), golden bush (Haplopappus linearifolius, and H. cooperi), Nevada joint fir (Ephedra nevadensis), beavertail cactus (Opuntia basilaris) and buckhorn cholla (O. acanthocarpa) making up the rest of the community. Washes contain sporadic populations of perennial grasses (Hilaria rigida), and cat claw (Acacia greggii). No rare, threatened, or endangered species, or BLM sensitive plants are known to occur in this area.

Wildlife

The gilded northern flicker (Colaptes auratus chrysoides), which is listed as an endangered species by the State of California, is found in the Joshua Tree woodland of Cima Dome. In 1978 (the most recent date for which data is available) the population was estimated to be one to two pairs. The woodland is habitat for a wide variety of desert species. A Habitat Management Plan for this area is to be completed in 1996.

The proposed ACEC is surrounded on the north, west, and south by Management Category I habitat for the desert tortoise which is Federally and State-listed as a threatened species. Tortoise numbers within the proposed ACEC are less than 20 per square mile.

Wilderness

The proposed ACEC encompasses all of the Magee/Atkins (CDCA-237), Deer Spring (CDCA-237A), Valley View (CDCA-237B), and Teutonia Peak (CDCA-238A) WSAs, and almost all of the Shadow Valley (CDCA-235A) and Cima Dome (CDCA-238B) WSAs. All of these WSAs are recommended by the CDCA Plan as nonsuitable for wilderness designation.

Recreation

Recreation activities include sightseeing, photography, nature study, rockhounding, camping, and hiking. Both hiking and 4-wheel driving are widely used means of seeing the area. Teutonia Peak and Wildcat Butte are popular hiking destinations. The unique features of this proposed ACEC are suitable for interpretation and education.

Grazing/ Wild Horses and Burros

The proposed ACEC lies within the Kessler Springs and Valley View ephemeral/perennial grazing allotments. The ACEC is also partly within the Cima Dome burro Herd Management Area (HMA). The Desert Plan prescribed a management level of 55 burros for the region.

Socio-Economic, Lands

The Cima Dome area is adjacent to the village of Cima, located at the junction of the Union Pacific Railroad and the Cima Road. The area is currently designated by the County of San Bernardino as Rural Conservation, which restricts development to lots of at least 40 acres.

AMENDMENT EIGHT
DESIGNATE THE CINDER CONES (NNL) AN NNL/ACEC

Geology-Energy-Minerals

The Cinder Cones region contains extensive lava flows interspersed with over 30 dormant volcanoes. The classical conical shape of many of the volcanic peaks indicates recent volcanic activity, perhaps only 1,000 years ago. The cones closest to Interstate 15 are about 10 million years old. A unique feature of the cinder cones is the two-color red and black cinders. Because of the vivid coloration, "soft" texture, and prominence, the Cinder Cones are highly susceptible to damage from road building and other surface-disturbing actions. Two cinder mines have operated since the 1950's.

The EMNSA Management Plan proposed a withdrawal of the Cinder Cones (20,320 acres) from mineral entry under the mining laws, but not the mineral leasing laws pursuant to Section 204 of FLPMA. These 20,320 acres would be added to the 4,800-acre Natural Area which is already under withdrawal. Together, these would cover most of the area within the proposed ACEC.

Vegetation

The proposed ACEC lies within a mojave yucca, perennial grass, and cactus community. Shrubs are widely dispersed in desert pavement, with blackbrush (Coleogyne ramosissima) being the dominant shrub and Stipa speciosa the dominant grass species. Mojave yucca (Y. schidigera) and two species of Opuntia (O. echinocarpa and O. basilaris) make up the rest of the dominant plant community. No threatened or endangered plants are known or expected to occur in the proposed ACEC.

Wildlife

The proposed ACEC contains a small portion of desert tortoise Management Category I in the Ivanpah-Shadow-Kelso desert tortoise population area. Average tortoise densities are estimated to be below 50 per square mile. Tortoise habitat management will be addressed in the Ivanpah-Shadow-Kelso Habitat Management Plan.

Wilderness

The majority of the proposed ACEC lies within the Cinder Cones (CDCA-239) and Rainbow Wells (CDCA-244) WSAs. Only a small segment of the ACEC is within the portion of WSA 239 recommended for wilderness. All of WSA 244 is recommended as unsuitable for wilderness.

Recreation

Major activities occurring in the area consist primarily of sightseeing and nature study. The area lends itself to interpretation and education.

Grazing / Wild Horses and Burros

The proposal lies within the Valley View and Kessler Springs cattle allotments. It is also within the Lava Beds burro HMA. The Desert Plan prescribed a retention level of 75 burros for this area.

AMENDMENT NINE
DESIGNATE THE GRANITE MOUNTAINS (RNA) AN RNA/ACEC

Vegetation

The proposed Granite Mountain RNA/ACEC is characterized by granite outcrops, sensitive riparian areas, and a diverse plant community consisting of over 400 taxa. The plant community exhibits an intermingling of the Sonoran, Great Basin, and the Mojavean deserts. Succulents, pinyon-juniper woodlands, mixed mountain scrub, and annual and perennial grass species are principal components. Two unusual, but not listed, species which occur in the area are Tetradymia argyrea and Ergiogonum heermannii var. floccosum.

Wildlife

A 1979 survey by the University of California, Santa Cruz, found one amphibian, 33 species of reptiles, 115 species of birds, and 40 species of mammals in the entire Granite Mountain range (Stein and Warrick, 1979). These numbers would be only slightly smaller for the proposed RNA/ACEC. The desert shrew, Mexican free-tailed bat, and dusky-footed woodrat are species which have been recorded in the Granite Mountains, even though the area is outside their normal range. The overall mountain range supports a herd of 15 desert bighorn sheep, a BLM sensitive species. The Granites also support a herd of 75 mule deer. Most of the lands in question have tortoise densities of less than 20 per square mile, although numbers may range up to 50 per square mile in small areas. Tortoise habitat management will be addressed in the Fenner-Chemehuevi Habitat Management Plan.

Cultural Resources

The proposed RNA/ACEC has a high potential for cultural resources. Over 96 archaeological sites have been discovered in the Granite Mountains, including 30 known rock art sites.

Wilderness

Most of the proposed ACEC lies within the portion of the Bristol/Granite Mountains WSA (CDCA-256) which the CDCA Plan recommended for wilderness designation. In addition, two sections of the ACEC (Sec. 13 and 25, T9N, R12E) are outside the recommended portion.

Recreation

The presently designated RNA is managed by the BLM and the University of California, with the goal of protecting its environment for research purposes. The area also attracts large numbers of visitors for purposes of rock climbing, hiking, nature study, camping, picnicking and photography. The most popular destinations in this area are informal campsites. They include Cottonwood Cove, Granite Pass, Sheep Corral and Budweiser Spring.

Grazing / Wild Horses & Burros

This site is located within the Granite Mountains grazing allotment. Approximately 400 cattle use this 350,000-acre allotment. Several developed springs, a corral, and fences can be found within the proposed ACEC. Feral cattle not belonging to the grazing lessee roam through the Granite Mountains and have caused localized overgrazing in the past. Two new fences have been proposed or funded for sites within the ACEC boundary that would limit cattle access to sensitive areas.

The proposed RNA/ACEC is also inside the Granite-Providence Herd Management Area (HMA). Although all burros have been targeted for removal, approximately 50 are still found in this HMA. Most use occurs outside of the proposed RNA/ACEC.

Geology-Energy-Minerals

Areas of high and moderate mineral potential for the occurrence of copper, silver, iron, gold, and zinc are present.

AMENDMENT TEN
DESIGNATE THE KELSO DUNES (ONA) AN ONA/ACEC

Vegetation

Almost a hundred species of plants grow on the Kelso Dunes - grasses, shrubs, and a profusion of showy spring wild flowers, the most conspicuous of which are pink sand verbena and white dune primroses. The plant life on these dunes is not only interesting and varied, but much of it is indigenous to the dunes. The CDCA Plan designated the Kelso Dunes as an Unusual Plant Assemblage, specifically, an Unusual Psammophytic (Sand Dune) Assemblage.

The area is characterized by widely scattered trees, shrubs, and grasses. The dominant shrubs are creosote (Larrea Tridentata) and burrobush (Ambrosia dumosa). Other plants associated with the south slope of the dunes are croton (Croton californicus), galleta (Hilaria rigida), dune grass (Panicum urvilleanum), and Indian ricegrass (Oryzopsis hymenoides). Beavertail cactus (Opuntia basilaris) and silver cholla (O. ecinocarpa) are cacti found in the lower flats. The desert willow (Chilopsis linearis) is found on the slopes of the dunes at several locations.

No rare, threatened, or endangered species or BLM sensitive plants occur or are known or expected to occur in this area.

Wildlife

The proposed Kelso Dunes ACEC is an area of stabilized and unstabilized dune communities. Common species include the Mojave fringe-toed lizard (Una scoparius), the desert kangaroo rat (Dipodomys deserti), the sidewinder (Crotalus cerastes), and the zebra-tailed lizard (Callisaurus draconoides). Coyotes (Canis latrans), blacktail jackrabbits (Lepus californicus), common ravens (Corvus corax), and redtail hawks (Buteo jamaicansis) may be seen less frequently. The Kelso Dunes are one of the few protected habitats for the Mojave fringe-toed lizard, a species restricted to areas of fine, windblown sand.

Low densities of desert tortoise (Xerobates agassizi), which is Federally and State-listed as threatened, occur in this portion of the Ivanpah-Shadow-Kelso desert tortoise population area, which has been delineated by the BLM as Management Category I.

Nine species of insects are endemic to the Kelso Dunes. The Kelso Jerusalem cricket (Ammopelmatus kelsoensis) and the Kelso giant treader cricket (Macrobaenetes kelsoensis), both of which are category 2 candidates for listing as threatened or endangered by the USFWS, have been collected in the dunes. The Kelso Jerusalem cricket, last observed in 1963, is found at the north base of sand declivities in association with sandpaper plant (Petalonyx thurberi), California croton (Croton californicum), and Indian ricegrass (Oryzpsis hymenoides) (CNDDB 1989). The Kelso giant sand treader is found on hard packed sand ridges. A group of endemic weevils at Kelso Dunes are relics of an ancient insect fauna which once had a much wider distribution.

Cultural Resources

During the early phases of data acquisition for the Desert Plan, one section within the Kelso Dunes was surveyed for cultural resources. The inventory revealed none. Actually, the occurrence of significant cultural resources in the dunes is improbable. The constant shifting of the sands

would alter the location of artifacts and their critical association to one another if, in fact, any existed in the dunes.

Recreation

The Kelso Dunes are one of the most popular recreation areas in the CDCA. Visitors are attracted to the site because of its outstanding opportunities for nonvehicular recreation, including sightseeing, nature study, research, hiking, and photography. The area has been closed to motorized vehicles since 1973.

Range Management

The proposed ACEC occurs within the Granite Mountain grazing allotment. Approximately 390 cattle graze throughout the year on this 350,000-acre allotment. Use of grasses in portions of the area is moderate.

Wilderness

The proposed ACEC would coincide with the portion of the Kelso Sand Dunes Wilderness Study Area (CDCA-250) which the CDCA Plan recommended as suitable for wilderness designation.

Geology-Energy-Minerals

Mineral surveys of the Kelso Dunes by the U.S. Geological Survey (USGS), the U.S. Bureau of Mines (BOM), and the BLM showed that the dunes have a high potential for silica and feldspar reserves, with by-product magnetite and gold. Also indicated is a low to moderate potential for undiscovered gold and copper resources. Magnetite was mined in the late 1960s, and an operation on a site in the southeastern portion of the dunes is presently under consideration.

The potential for oil and gas resources within the proposed ACEC is unknown but considered unlikely in the USGS/BOM report. Active oil and gas leases (1984) are located in this area, but no oil and gas has been discovered anywhere near the study area up to January 1988.

AMENDMENT ELEVEN
DESIGNATE TURTLE MOUNTAINS AN NNL/ACEC

Vegetation

The plant community of the Turtle Mountains is diverse and consists of the Mopah Spring fan palms (Washingtonia filifera) and associated species of palo verde (Cercidium floridum). There is also cat claw (Acacia greggii), bladderpod (Isomeris arborea), and fourwing saltbush (Atriplex canaescens). Upper benches consist of creosote bush (Larrea divaricata), bursage (Franseria dumosa), Mojave yucca (Yucca schidigera), spiny hop-sage (Gravia spinosa), incienso (Encelia farinosa), and scattered populations of desert lavender Hyptis emoryi). Hedgehog cactus (Echinocereus Engelmannii var. chrysocentrus), deer-horn cholla (Opuntia acanthocarpa), and barrel cactus (Ferocactus acanthnodes) are common.

Dominant plant species in the vicinity of Mopah Spring include clumps of honey mesquite (Prosopis juliflora var. torreyana), Anderson desert thorn (Lycium andersonii var. andersonii), bladderpod, and

allscale (Atriplex polycarpa). The spring pool itself is surrounded by rabbitfoot grass (Polypogon monspeliensis), an unusual stand of five mature California fan palms (Washingtonia filifera), and a clump of immature palms. Although a native species to the California desert, these fan palms were planted at the spring by Lillian Hammond in 1924.

No rare, threatened, endangered or sensitive plant species are known to occur in the proposed ACEC.

Wildlife

Wildlife of the proposed ACEC includes the desert bighorn sheep (Ovis canadensis nelsoni), the prairie falcon, and the golden eagle (all BLM sensitive species), and the desert tortoise (Gopherus agassizii), a Federally and State-listed threatened species. Mopah Spring is a key water source for the bighorn sheep.

Cultural Resources

The Turtle Mountains encompass a region of high cultural resource sensitivity. Site types include temporary camps, rock shelters, rock art, rock alignments, tool production stations, and quarry sites. The area includes the Mopah Springs ACEC, which was designated in 1980 for protection of cultural values.

Recreation

The proposed ACEC offers outstanding opportunities for primitive types of recreation including sightseeing, hiking, photography, and nature study. The diverse topography and relatively dense vegetation offer visual screening which enhances primitive recreation and creates numerous opportunities for solitude. The steep volcanic and granitic cliffs and spires of the Mopah Peaks are recognized as excellent locations for rock climbing and are included on the Sierra Club's list of California Desert Peaks. The Turtle Mountains also offer rare opportunities to view such elusive creatures as the desert bighorn sheep and the golden eagle in their natural habitat. Because the area has been closed to motor vehicle use since 1976, the proposed ACEC does not offer any opportunities for motorized recreation.

Geology-Energy-Minerals

The proposed ACEC contains local areas that are considered to have a moderate to high potential for gold, silver, copper, zinc, tungsten, and lead (USGS Bulletin, 1988). The potential for nonmetallics (travertine, perlite, semi-precious stones), oil and gas, and geothermal pegmatite minerals is very low.

Soils

The proposed ACEC contains steep rocky bluffs, limestone outcrops, and well developed bajadas that contribute to soil development and structure. Many areas consist of highly erodible soils which overlay limestone and granitic outcrops. Most soils are silty calcareous, rocky alluvium which are highly erodible and sensitive to mining or off-road vehicle use.

Wilderness

The entire area of the proposed ACEC is within the portion of the Turtle Mountains WSA (CDCA-307) which the CDCA Plan recommended nonsuitable for wilderness designation.

AMENDMENT TWELVE
DESIGNATE THE DESERT LILY PRESERVE AN ACEC

Vegetation

Vegetation in the vicinity of the preserve is very sparse; the dominant species during the wet season is the desert lily (Hesperocallis undulata). Mesquite is the dominant perennial species in the hummocks at the site and to the east and south. Ironwood (Olneya tesota) and palo verde (Cercidium floridum) trees are also abundant in the northern and southern portions of the area. Creosote bush (Larrea divaricata) is the predominant shrub in the surrounding areas. Other shrubs that occur in lesser numbers are bursage (Franseria dumosa), cheesebush (Hymenoclea salsola), and species of Atriplex.

Other wildflowers besides the desert lily include primroses (Oenothera deltoides, O. decorticans), sand verbena (Abronia villosa), purple mat (Nama demissum), and galleta grass (Hilaria rigida).

Cultural Resources

The preserve contains at least five cultural sites which are extensive prehistoric camp sites associated with Palen Dry Lake, with an ephemeral stream, or with mesquite thickets. Artifacts include numerous flakes of fine, clear-colored chalcedony, scorched rock, hammerstones, manos, shards of brown ware, burned and unburned tortoise shell, and blade fragments.

Recreation

The preserve can easily be reached by visitors from the metropolitan areas by I-10 and the Desert Center-Parker Road. It is a popular area in wet seasons, when there are outstanding displays of the desert lilies. Nearby areas support some use by OHVs, but vehicle access is not allowed in the area of the proposed ACEC.

AMENDMENT THIRTEEN
DESIGNATE A PORTION OF THE IMPERIAL DUNES AN NNL/ACEC

Vegetation

The proposed ACEC contains three plant communities - the Desert Psammophytic (dune loving) Shrub, the Desert Microphyll Woodland, and the Combined Creosote Bush Scrub/Desert Microphyll Woodland. These plants are specially adapted to the rigorous needs of sustaining life within a sandy environment.

There are several plant species of special management concern. These include three candidates for listing as endangered or threatened by the United States Fish and Wildlife Service, three plants

listed by the State of California as either threatened or endangered, and two species that are listed by the California Native Plant Society. Specific information about these plants can be found in the Imperial Sand Dunes Habitat Management Plan (USDI, BLM 1987a) and the Imperial Sand Dunes Recreation Management Plan (USDI, BLM 1987b).

The plants of concern include: Peirson's milkvetch (Astragalus magdalenae var. peirsonii), silver-leafed dune sunflower (Helianthus niveus ssp. tephrodes), giant Spanish needle (Palafoxia arida var. gigantea), Wiggins' croton (Croton wigginsii), sandfood (Ammobroma sonorae), Borrego milkvetch (Astragalus lentiginosus var. borreganus), ribbed cryptantha (Cryptantha costata), Coulter lyrepod (Lyrocarpa coulteri var. palmeri), and Laurea tridentata var. arenaria.

Nearly the entire dune system has been designated a Unique Plant Assemblage and Wildlife Habitat Area. The plan for these designations has been included within the Imperial Sand Dunes Habitat Management Plan.

Wildlife

The proposed ACEC contains a unique sand dune ecosystem inhabited by a variety of specially adapted forms of wildlife. These wildlife species are suited to wide temperature ranges, to existence in loose sandy soils, and to extremely arid conditions. Within the Desert Microphyll Woodland and Combined Creosote Bush/Desert Microphyll Woodland habitats, relief from the effects of the desert sun is provided by shade from palo verde, ironwood, and mesquite trees. These woodlands support higher density and diversity of wildlife than the Desert Psammophytic Shrub habitat.

Three species of management concern are found in the amendment area. The flat-tailed horned lizard (Phrynosoma mcallii) is fully protected by the State of California. Both the flat-tailed horned lizard (FTHL) and the Colorado fringe-toed lizard (Uma notata) are candidates for Federal listing as well as BLM sensitive species. The Andrew's scarab beetle (Pseudocotalpa andrewsi) is also a candidate for Federal listing.

Game species of management concern which occur in the area include the burro mule deer, black-tailed jackrabbit, cottontail rabbit, coyote, mourning dove, and Gambel's quail.

The uniqueness of the sand dune adapted wildlife has attracted the interest of the scientific community. The Couch's spadefoot toad (Scaphiopus couchi) has been studied in the past due to its ability to survive in extreme arid conditions. More recently, scorpions (Paruroctonus spp.) have been studied.

Cultural Resources

The sand dunes are generally considered to be devoid of archaeological resources. There may be some small temporary camps present, but the shifting sands have either disrupted any possible resources or have buried them. The sand dunes are not considered significant by Native American groups.

Recreation

The area of the proposed ACEC was closed to off-highway vehicle traffic in 1977. The principal recreational uses are hiking, bird watching, nature study, photography, and hunting. Most of the users come from the San Diego, Los Angeles, and Phoenix metropolitan areas. The National

Natural Landmark designation has attracted visitors from throughout the United States and Canada. Use is generally limited to short trips. Approximately 1,200 visits annually generate roughly 7,200 visitor hours.

Geology-Energy-Minerals

Currently there are no known locatable minerals within the proposed ACEC. Portions of the area overlap the Glamis and Dunes Known Geothermal Resource Areas. There are no geothermal leases in the area. A limited potential exists for sand and the underlying gravel for use in the construction industry. However, an ample supply is found elsewhere. Several mining claims are located in the northern and southern portions of the proposed ACEC, but there is no mining activity at this time.

AMENDMENT FOURTEEN
CHANGE TWO PARCELS IN PIPES CANYON FROM "L" TO UNCLASSIFIED

Wildlife

Wildlife common to this area include a variety of bird species, as well as lizards, snakes, and rabbits. There are no known State or Federally listed wildlife species in this area.

Vegetation

Vegetation is a blend of Joshua trees and pinyon-juniper woodlands. There are no Federally or State-listed plant species and no BLM sensitive species or unique plant assemblages in this area.

Cultural Resources

There are no known recorded cultural resources on these two parcels.

Geology-Energy-Minerals

The parcel in the north half of Section 6 has low potential for salable, leasable, and locatable mineral resources. The north half of Section 36 has moderate potential for precious metals. There are a number of lode claims within this parcel which were patented in 1900. There has been no recorded mineral production near either of the subject parcels.

Lands

The San Bernardino County General Plan designates the proposed ACEC area as RCN (Rural Conservation). Rural Conservation lands include a wide variety of publicly and privately owned land which, because of its location, access limitations, natural resources, or scenic qualities, is suitable for low-intensity uses and limited human habitation.

AMENDMENT FIFTEEN
CHANGE MUC OF 10.5 SECTIONS IN ARROYO SALADA OPEN AREA FROM "I" TO "M"

Vegetation

The study area lies within the Creosote Bush Scrub vegetation type of the Sonoran desert. The soils range from gravelly sands to loamy coarse sands and support various plant communities. The hillsides are predominantly covered with creosote bush (Larrea tridentata) and burrobush (Ambrosia dumosa). Occasional mesquite (Prosopis glandulosa) hummocks are scattered throughout the area. There is very little understory cover of grasses and forbs on the hillsides. The drainages are sandy soil with desert willow (Chilopsis linearis), smoketree (Dalea spinosa), and tamarisk (Tamarix sp.). Shrubs in the drainages include alkali goldenbush (Happlopappus acradenius), Hymenoclea salsola, and Eriogonum deserticola.

No State or Federally listed species or BLM sensitive species are known to occur in the amendment area at this time. The salton milkvetch (Astragalus crotalariae), a plant species on the California Native Plant Society (CNPS) watch list (list 4), does occur. Intensive on-the-ground inventories for all possible listed and BLM sensitive species have never been completed for this area. The habitat of the area is such that several BLM sensitive species could occur. These include Piersons milkvetch (Astragalus magdalenae var. piersonii), Borrego milk vetch (Astragalus lentiginosus var. borreganus), Flat seeded spurge (Chamaesyce platysperma), and Orcutts woody aster (Xyloriza orcutti).

Wildlife

Two species of BLM concern are found within the amendment area. The flat-tailed horned lizard (Phrynosoma mcallii) is a Category 1 candidate for Federal listing as a threatened or endangered species. The proposed amendment site was inventoried in 1989 by the California Department of Fish and Game (CDFG); however, the data has yet to be analyzed. Previous data indicate that the affected area consists mostly of Category II flat-tailed horned lizard (FTHL) habitat. Category II habitats are those that maintain stable, viable populations of FTHLs; they can be managed to halt further declines in habitat values. Only half of one section has been identified as being Category I habitat.

The Colorado Desert Fringe-toed Lizard (CDFTL) (Uma notata) is a Category 2 candidate for Federal listing. No surveys have been conducted within the amendment area to determine CDFTL relative abundance, although the species has have been observed in the affected area.

Important habitats within the proposed amendment site include the San Felipe Creek watershed and areas with mesquite hummocks. Perennial vegetation in these habitats provide cover, forage, and nesting and burrow sites. Areas of wind blown sand are important to both the FTHL and the CDFTL.

Game species of management interest include the mourning dove (Zenaida macroura), the white-winged dove (Zenaida asiatica), Gambel's quail (Callipepla gambelii), black-tailed jackrabbit (Lepus californicus), desert cottontail (Sylvilagus auduboni), and coyote (Canis latrans). Hunting is managed primarily by the CDFG. BLM assists the CDFG with regulation of dove hunting due to the migratory status of these birds, although the amendment area receives little hunting pressure.

Cultural Resources

There has been little inventory within the study area. Three studies have recorded 23 archaeological sites. BLM conducted sample transects in 1978 while developing the California Desert Conservation Area Plan. Archaeologists from Caltrans recorded four sites and a host of isolates during an inventory for a proposed gravel pit.

A reconnaissance inventory of portions of the amendment area by State Parks and Recreation archaeologists revealed an archaeological record focused around the former shoreline of Lake Cahuilla (Dallas and Wheeler,1984). This inland lake existed on an intermittent basis for approximately 2,000 years before its final desiccation in approximately 1600 A.D. The lake created a relatively rich ecosystem in the arid stretches of the Colorado Desert. Prehistoric Indians followed the receding water during their quest for food. Twelve recorded archaeological sites consist largely of temporary camps. These sites contain a wide variety of artifacts and features and exhibit a wide range of variability. Some of the more complex temporary camps contain stone tools, flakes, hammerstones, manos, pottery, and in at least two cases, cremations. Smaller, more ephemeral camps consist of small clusters of pottery and flakes.

The region surrounding the shoreline contains a relatively high potential for discovering archaeological sites. Sites may also be found below the shoreline. The remaining areas above the Lake Cahuilla shoreline appear to exhibit a low to moderate potential for containing archaeological sites. The region is barren and quite arid. Plants of nutritional value are scarce, but are found adjacent to some of the dry water courses.

Geology-Energy-Minerals

The area is open to mineral and leasing laws and it has been classified as prospectively valuable for oil and gas as well as geothermal resources. However, there are presently no oil and gas leases in effect within the study area. Two wildcat wells drilled in the region during the early 1980s proved to be barren of oil or gas. Three geothermal leases are present, although there has been no exploration. Several mining claims exist, but they are in only one section (T. 11 S., R. 9 E., Section 12 SBBM). Finally, there have been no mineral material sales in the area.

Recreation

The amendment area is largely composed of the Arroyo Salada Open Area. This area encompasses 6,840 acres and is adjacent to the 14,000 acre Ocotillo Wells State Vehicular Recreation Area. The terrain is relatively flat, though cut by numerous washes and interspersed with mud and sandstone hills, such as the San Felipe Hills. Some small sand dunes are also present.

Off-highway vehicle (OHV) playriding and touring are the dominant recreational activities in the area. All dry washes wide enough for vehicular passage serve as routes for OHV touring. Together with a network of informal 4-wheel drive trails, they facilitate driving throughout the study area. Cross-country travel is common in the flat central portion of the area, where there are few barriers. Since there are few maintained roads, OHV's are also used as a means of engaging in other activities which include camping, mineral collecting or "rockhounding," hunting, and nature study.

The Arroyo Salada Open Area attracts not only local residents but OHV enthusiasts within a 100-mile radius, especially from the San Diego metropolitan area. Out-of-town visitors typically come

for a weekend, camping at various locations off Highway 78 and throughout the open area. Visitor services catering to OHV recreationists are available nearby at the Blu-Inn and Ocotillo Wells. Between 1984 and 1988, there were an average of 14,246 visitors per year in and near Arroyo Salada Open Area. Winter holidays attract the most visitors, with as many as 3,000 visitors present over a Thanksgiving weekend.

Competitive OHV races have taken place in the past but not since 1983. The San Diego based American Motorcyclist Association (AMA) District 38 cited problems with the checkerboard pattern of public and private lands as a hinderance to racing. With the acquisition of private lands by public agencies, interest in racing should increase.

Lands

The proposed amendment involves approximately 7,000 acres of public lands. Approximately 3,100 acres are withdrawn by the Bureau of Reclamation (BR). The BLM has surface management of these lands through a Cooperative Agreement with BR.

AMENDMENT SIXTEEN
EL MIRAGE: CHANGE MUC AND VEHICLE ACCESS

Motorized Vehicle Access

The public and private land within the amendment area is criss-crossed with numerous routes of travel and reflects the intensive OHV play that the area has received for over 30 years. This use occurs on private property, county maintained roads, and undesignated public lands. Such use is not only illegal but is also inconsistent with the land use prescription of the CDCA Plan, with the exception of approximately 1,280 acres of public land on the El Mirage Dry Lake bed, which are currently classified as Multiple Use Class (MUC) "I"; vehicle access is designated "open." This land is completely surrounded by private land. A few miles to the north and east are public lands in which vehicle access is undesignated and lands are "unclassified" and available for disposal.

Socio-Economic

The communities of El Mirage and Shadow Mountain, which are adjacent to the El Mirage Cooperative Management Area (Management Area), are directly impacted by the OHV play that occurs throughout the amendment area. This unmanaged recreational use has resulted in a de facto "open area" with unacceptable levels of trespass, vandalism, and natural resource damage.

The BLM is managing the area under interim guidelines until the Management Plan, which was completed in August 1990, is adopted into the CDCA Plan through this amendment. Interim measures have included taking appropriate action to reduce the incidence of OHV play in the adjacent communities and to keep OHV play inside the boundaries of the management area.

Recreation

The Management Area is considered to be of regional importance in providing recreation for the people of Southern California. The area receives approximately 110,000 visitor use days per year. The types of activities include the use of motorcycles, all terrain vehicles, dune buggies, 4-wheel

drives, airplanes, ultralights, helicopters, gyrocopters, gliders, hang-gliders, and para-sails. Other activities include kite flying, mountain bike riding, the use of model rockets, hunting, and shooting.

Recreational activities vary from formal and highly organized vehicle speed timing events to loosely structured activities involving family groups. The Management Area is a popular day use area for large numbers of people from the Los Angeles and San Bernardino metropolitan areas. It is common for recreational visitors to participate in more than one activity while visiting the area.

Vegetation

No known State or Federally listed threatened or endangered plant species are known to exist in the amendment area, nor are any candidate species known to be present. The vegetation of the Management Area consists of three basic types which are typical of the Western Mojave Desert: Creosotebush Scrub, Mojave Saltbush-Allscale Scrub and Iodinebush-Alkali Scrub. The northeast corner of the amendment area contains about 8,300 acres of the Western Mojave Desert Mojave-Saltbush unusual plant assemblage.

Wildlife

Wildlife species within the Management Area are typical of the Mojave Desert. Two species of special management concern are the desert tortoise, which is Federally and State-listed as threatened, and the Mohave ground squirrel, which is State-listed as threatened. A variety of other species is present, none of which are found in large numbers. Typical mammals include the black-tailed jackrabbit, coyote, kangaroo rat, desert woodrat, and the antelope ground squirrel.

Desert tortoise habitat in Management Category I occurs within the northern two-thirds of the Amendment Area. Systematic inventories have not been conducted recently to determine the size and health of the existing population. Due to the extent of OHV play within the Management Area, few tortoises are expected to occur there at the present.

The entire Amendment Area is within the historic range of the Mohave ground squirrel. The highest population densities are thought to occur north and west of the lake bed, outside of the Management Area. Records indicate that in 1980 a Mohave ground squirrel was trapped north of the Management Area, and another was trapped south of El Mirage Road and the Management Area boundary.

Common bird species that use the habitats adjacent to the dry lakebed include the mourning dove, common raven, roadrunner, cactus wren, red-tailed hawk, loggerhead shrike, great horned owl, burrowing owl, black-throated sparrow, blue-gray gnatcatcher, yellow-rumped warbler, horned lark, and LeConte's thrasher.

Reptiles commonly present include the desert tortoise, zebra-tailed lizard, Mojave rattlesnake, sidewinder, gopher snake, racer snake, and the horned lizard.

Cultural Resources

Very little inventory has been conducted in this area. Small project-specific inventories for mining activities and desert land entries have resulted in the location and recordation of eight archaeological and historic sites. The resources include prehistoric trails, cairns, trail shrines, lithic scatter camps, historic mining remains, and a homestead (circa. 1912).

Integrity of the known resources is poor due to intensive OHV impacts. Although there is a potential for additional cultural resources to be located in the area, sensitivity is considered low overall.

Geology-Energy-Minerals

There are no active mining operations within the management area or on lands affected by this amendment. There are numerous mining claims. Scheelite and tungsten ore have been mined in the southern Shadow Mountains. The lake bed contains a large body of clay suitable for pond sealant.

AMENDMENT SEVENTEEN
DELETE PALEN GRAZING ALLOTMENT

Range management

Although it was established as an ephemeral sheep grazing allotment in the CDCA Plan, the Palen Allotment has not had authorized grazing use since completion of the Plan in 1980.

Vegetation

The Palen Allotment supports a Sonoran Creosote Bush Scrub community as described by Holland, 1986. The shrub density is moderate to low, with very few grasses or forbs found within the interspace. Lack of annual grasses and forbs is the result of current drought conditions found throughout the area.

Wildlife

Wildlife commonly found in the area include the antelope ground squirrel and the Mojave rattlesnake. Prairie falcons occupy the mountains while using the flatter areas for hunting. Gambel's quail can be found near water sources. Biologists from the California Department of Fish and Game believe desert bighorn sheep move between the Granite and Palen Mountain ranges and may pass through the allotment or along its eastern edge. A small herd of bighorn occurs in the Coxcomb Mountains just west of the allotment. There is a small population of burro mule deer in the Palen Mountains.

Cultural Resources

A small portion of the Palen Dry Lake ACEC is located in the southern end of the allotment. Camp Coxcomb of the Desert Training Center (World War II) is also located within the boundary of the Palen Allotment. The potential for the presence of cultural resources is moderate to high surrounding Palen Dry Lake and low elsewhere. The Palen Dry Lake archaeological sites are camp sites.

AMENDMENT EIGHTEEN
DELETE THE RICE VALLEY GRAZING ALLOTMENT

Range Management

The Rice Valley Allotment was established as an ephemeral sheep grazing allotment in the CDCA Plan (1980) and was grazed in 1983, from April 1 to April 30. Prior to the CDCA Plan, the area was leased in the 1970's and was used for two or more years. An eight-year lease was established in 1988; however, because of drought conditions, no grazing occurred through 1990. Grazing also occurs on private lands south of the allotment.

Vegetation

The Rice Valley Allotment supports a Sonoran Creosote Bush Scrub community in its southern quarter. The remaining area is a Stabilized and Partially-Stabilized Desert Dunes community transected by Desert Dry Wash Woodland communities. The shrub density is moderate to low, with very few ephemeral grasses and forbs found within the interspace. Lack of annual grasses and forbs is the result of current drought conditions found throughout the area.

Wildlife

Wildlife which commonly occur in the Rice Valley Allotment are roadrunners, antelope ground squirrels, and western rattlesnakes. A population of burro mule deer is established in the mountains. Desert bighorn sheep were found in the Big Maria Mountains in the early 1980s but have not been observed in recent years.

AMENDMENT NINETEEN
DELINEATE THREE CATEGORIES OF DESERT TORTOISE MANAGEMENT

Wildlife

Desert tortoise densities have been decreasing steadily in many areas of the CDCA. Tortoise densities were delineated in the late 1970's, based on transect and study plot data gathered at that time (Berry and Nicholson, 1984). Since that time, trend plot studies have shown that tortoise densities have decreased significantly in many areas. Although not shown by inventory or monitoring data, the distribution of tortoises has presumably decreased as population density has decreased.

The desert tortoise was State-listed as a threatened species by the California Fish and Game Commission on June 22, 1989 (California Code of Regulations, Section 670.5(b)(4) of Title 14) and Federally listed by the U. S. Fish and Wildlife Service as a threatened species on April 2, 1990 (Federal Register 55: 12178-12191).

Trends vary substantially from one region to another in the California Desert. Populations are declining most dramatically in the West Mojave, where declines have ranged from 10 percent to 65 percent over the last six to seven years. Disease has played a major role in these declines. Due largely to raven predation, the number of juvenile tortoises is near zero in much of the Western Mojave. The lack of recruitment of adults into the population makes it difficult to compensate for the high mortality from disease (Berry 1990). Urban and agricultural development

and off-highway vehicle free-play have reduced populations substantially in some areas such as the southern part of the West Mojave.

Populations in some areas of the East Mojave (e.g., southern Ivanpah Valley and Chemehuevi Valley) are stable or declining only slightly, while others (e.g., upper Ward Valley) are declining significantly. In the Colorado Desert, localized disease outbreaks are resulting in a highly uneven distribution of tortoises. Declines in some areas (e.g., Chuckwalla Bench) have been as much as 70 percent over the last eight years, while other areas (e.g., Chuckwalla Valley) have seen little decline (Berry, 1990).

Tables 2-2 and 2-3 in the preceding chapter show, respectively, the distribution of tortoise habitat among land administrations in the CDCA and the number of acres of BLM land in Management Categories I, II, and III in each of the four population areas. Overall, the Bureau manages over 53 percent of lands shown as Category I, II, and III. Of these lands, 53 percent are in Category I, 11 percent are in Category II, and 36 percent are in Category III.

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

CHAPTER FOUR

ENVIRONMENTAL CONSEQUENCES

AMENDMENT ONE
DESIGNATE AN ACEC AT MANIX TO PROTECT PALEONTOLOGICAL RESOURCES

Alternative A: Adopt Amendment

Paleontology/Cultural Resources

Designation of the proposed ACEC would assure that paleontological and archaeological resources would receive the protection needed to preserve them for future scientific research. This would be accomplished through the requirement for an approved plan of operations for all mining activities other than casual use. Specific reclamation and mitigation measures would be placed on mining operations for additional protection of the area's resources.

Wildlife/Vegetation

ACEC designation would have a minor positive effect on wildlife and vegetation, because the requirement for a plan of operations for mining would allow an opportunity to review all mining activities. Specific reclamation and mitigation measures would increase protection of the area's resources. Since no endangered plant or animal species are known to be present, Section 7 (Endangered Species Act) consultation would not be required.

Recreation

Recreation would not be affected, except that measures would be taken to prevent recreational collection of fossils. No existing roads are proposed for closure. No new recreational access roads would be authorized or allowed.

Livestock Grazing

ACEC designation would not affect the Cady Mountain grazing allotment. Since paleontological resources are not threatened by cattle grazing (Jefferson, 1990), management of the ACEC would not restrict grazing or range improvements.

Geology-Energy-Minerals (G-E-M)

ACEC status would help mitigate impacts from mining, since a plan of operations would be required for all mining activities other than casual use. Some delay for mining could result.

Alternative B: Exclude Private Lands

Paleontological/Cultural Resources

Preservation of 3,900 acres of public land for future paleontological and archaeological research would be assured. Resources on private land would not be given consideration. Removal of private land from the ACEC would eliminate any potential conflicts with private landowners and enable BLM to concentrate its management on a smaller area.

Wildlife, Vegetation, Recreation, Grazing, G-E-M

Effects would be the same as for Alternative A.

Alternative C: Reduce Size of Proposed ACEC

Paleontological/Cultural Resources

Reduction of the size of the ACEC to known fossil-containing locations would ensure that these areas would receive the protection necessary to preserve the resource. Peripheral Manix Lake deposits would be excluded from ACEC status and could be impacted by mining or other authorized uses. There could be damage to or loss of paleontological or archaeological resources on peripheral areas containing deposits.

Wildlife, Vegetation, Recreation, Grazing

Same as Alternatives A and B.

Geology-Energy-Minerals (G-E-M)

This alternative would affect mineral operations on only 2,950 acres rather than the larger acreages of Alternatives A and B.

Alternative D: Change Multiple-Use Class from M to L

All resources

The environmental effects would be the same as those for Alternative A. Under Class "L", a plan of operations is required for mining activities other than casual use, and greater attention is paid to vehicle use and other intrusive activities. However, the change in multiple-use-class would fail to provide the special attention given ACEC's, including possible additional funding priority. Further, redesignating this site as Class "L" would create a "spot zone". Management of isolated "spot zones" is not practical.

Alternative E: Reject Amendment (No Action)

Paleontological/Cultural Resources

Valuable, nonrenewable resources could be lost through mining, theft, OHV activity, vandalism, or inadvertent destruction.

Wildlife/Vegetation

There would be no negative effect, but the opportunity for protection of wildlife and vegetative resources through ACEC management and the requirement for plans of operation for mining would be lost.

Livestock Grazing

There would be no effect on the Cady Mountain Allotment.

Geology-Energy-Minerals (G-E-M)

There would be no effect on mineral exploration or development.

AMENDMENT TWO
ENLARGE BLACK CANYON CULTURAL AREA ACEC (NO. 35)

Alternative A: Adopt Amendment

Cultural Resources

Enlargement of the Black Canyon Cultural Area ACEC would assure that cultural resources within the entire area would receive the highest BLM priority for monitoring and funding. Proposed management actions are listed in Chapter 2. These actions would reduce the vandalism and chances of loss of the unique and irreplaceable resources present within the ACEC.

Recreation

Expansion of the ACEC would, in the long term, improve the quality of recreation in this area by protecting the unique resources (petroglyphs) in this area for future generations to enjoy and appreciate. Interpretive signing would enhance the public's enjoyment of these resources.

Wildlife/Vegetation

The more intensive management of an ACEC would benefit wildlife and vegetation through mitigation of disturbances and increased ranger presence within the expansion area. Increased protection would provide minor benefits to the federally listed desert tortoise, the State-listed Mohave ground squirrel, and raptor nesting habitats.

Geology-Energy-Minerals (G-E-M)

One of the management actions of the expanded ACEC would be to petition for withdrawal of significant rock art sites from all mineral entry. The total acreage to be withdrawn would not exceed 500 acres, and individual withdrawals would be no greater than 20 acres. Environmental assessments would be prepared on proposed withdrawals. Because of their small area, the effects of the withdrawals on extraction of or exploration for locatable and leasable minerals, gas, and oil would be minimal.

Alternate B: Reject Amendment (No Action)

Cultural Resources

The unique and significant cultural resources would not receive the priority and intensive management they need. Continued impacts and potential long term loss due to vandalism, theft, mining operations, and unauthorized vehicle use would continue. The existing efforts to document, mitigate and control these impacts would continue, but might be insufficient.

Recreation

Lack of ACEC management and the continued difficulty of controlling vehicle use would result in continued vandalism of rock art sites and the potential loss of valuable educational opportunities and enjoyment for many recreationists.

Wildlife/Vegetation

There would be no effect. The habitat of upland desert flora and fauna, including the desert tortoise, Mohave ground squirrel, and raptors would continue to be threatened by unauthorized OHV use, mining operations, and lack of adequate ranger patrol within the proposed expansion area.

Geology-Energy-Minerals (G-E-M)

Mineral exploration and development would not be affected.

AMENDMENT THREE
COACHELLA VALLEY FRINGE-TOED LIZARD RNA/ACEC

Alternative A: Adopt Amendment

Wildlife, Vegetation

Consolidation of the three areas into a single RNA/ACEC would benefit wildlife and botanical resources by facilitating management of these areas. An ACEC management plan could have a minor benefit by requiring interpretive signs and education of visitors.

Recreation

Adoption of the amendment could have a slight positive effect on recreation in the Coachella Valley Preserve (CVP). While creation of the Preserve has eliminated many of the impacts which caused a decline in CVFTL population, trespass by OHVs and horseback riders still occurs within the area. The ACEC designation would require an activity plan which could recommend interpretive signs and visitor education. ACEC status would also make management direction more visible on public records and in land use plans so that the objectives would be considered in any future management decisions on this area.

Cultural Resources

Expansion of the ACEC is an administrative action which will have no direct effect on cultural resources. If ACEC management should require ground disturbance in the future, an inventory and evaluation of cultural resources would be done as required by Federal law to assure consideration of potential impacts.

Since the overall goal of the ACEC expansion is to maintain critical habitat for the CVFTL and, therefore, to discourage ground-disturbing activities, ACEC designation should have an indirect benefit on cultural resources, as well as vegetation and wildlife.

Alternative B: Reject Amendment (No Action)

All Resources

Management would continue as it is presently directed by the agreement between the BLM, the USFWS, CDFG, and TNC, as outlined in the Coachella Valley Preserve System Management Plan. Some trespass by OHV's and horseback riders would continue.

AMENDMENT FOUR
DELETE HALLORAN WASH ACEC (NO. 29)

Alternative A: Adopt Amendment

Cultural Resources

There would be no effect since there are no cultural resources requiring special management within the area. If cultural resources are discovered in the area, they will be adequately protected by provisions of the Archaeological Resources Protection Act (e.g., felony-level penalties and permit requirements), the National Historic Preservation Act (e.g., Section 106 evaluation process), the National Environmental Protection Act, and the Federal Land Policy and Management Act, as well as by routine ranger patrols and archaeological monitoring.

Wildlife

Management of the desert tortoise would be the same with or without an ACEC and would depend upon the prescriptions of the Ivanpah-Shadow-Kelso Habitat Management Plan when it is completed.

Alternative B: Reject Amendment (No Action)

All Resources

ACEC status would be continued for an area which fails to meet the ACEC criteria set forth by the BLM; i.e., relevance, importance, and the need for special management. The requirement for plans of operation for mining activities other than casual use would continue, causing some inconvenience to miners.

AMENDMENT FIVE
DESIGNATE AMBOY CRATER AN NNL/ACEC

Alternative A: Adopt Amendment

Recreation

ACEC designation would not affect plans for recreational use, education, and interpretation as described in the Amboy Crater NNL Management Plan. It would increase the priority of this area for funding and monitoring.

Geology-Energy-Minerals (G-E-M)

ACEC designation would emphasize the importance of protecting Amboy Crater as an excellent example of a volcanic cinder cone. However, the new designation would provide little or no additional protection, since the recently completed NNL Management Plan has already outlined procedures for mitigating and avoiding damage to the crater. The intent of the Plan to withdraw portions of this area from mineral entry would be unchanged.

Alternative B: Reject Amendment (No Action)

Recreation

Rejection of ACEC designation would not affect recreation plans which have been outlined in the Amboy Crater NNL Management Plan.

Geology-Energy-Minerals (G-E-M)

Lack of ACEC designation would not affect the recommendation of the Amboy Crater Management Plan on withdrawal of this area from mineral entry.

AMENDMENT SIX
DESIGNATE THE BIGELOW CHOLLA AREA AN RNA/ACEC

Alternative A: Adopt Amendment

Vegetation

ACEC designation would give recognition to this outstanding assemblage of Bigelow Cholla. Although this fine stand of cholla is not threatened by mining, OHV use, or other land uses, ACEC status would provide a mechanism for protection against these and other impacts if they should arise in the future. Protection from other possible impacts would also be derived from the cooperative management of the RNA/ACEC by the BLM and the University of California.

Wildlife

The minimal benefits described for vegetation would also apply to wildlife, including the desert tortoise.

Recreation

This dense stand of cholla, so close to a major highway, would be protected from potential development and vehicle damage, however unlikely, so that passersby would continue to enjoy it.

Geology-Energy-Minerals (G-E-M)

ACEC designation would not affect mineral exploration and development, since the area is withdrawn from mineral entry.

Alternative B: Reject Amendment (No Action)

Vegetation/Wildlife

The vegetative and wildlife resources would continue under existing conditions which, so far, have not adversely affected the unique plant assemblage located here.

Recreation

There would be no effect on current recreational use.

AMENDMENT SEVEN
DESIGNATE CIMA DOME ONA AN ONA/ACEC

Alternative A: Adopt Amendment

Wildlife/Vegetation

Wildlife and vegetation would benefit from management actions prescribed in the EMNSA Plan. These include closing vehicle routes where necessary, maintaining the existing mineral withdrawal and withdrawing 320 additional acres, and routinely monitoring the condition of springs.

Grazing / Wild Horses & Burros

No impact on livestock operations or the management of wild burros is expected.

Recreation

ACEC status could have a minor positive effect by calling attention to the area's many recreational attractions and by providing increased funding for interpretation and education for visitors.

Socio-economic

There should be no effect on private lands near the community of Cima Dome.

Alternative B: Reject Amendment (No Action)

All Resources

Management of all resources would be as prescribed in the EMNSA Plan or the same as those described for Alternative A. Except for the minor potential benefit to visitor interpretation and education provided by ACEC status, there would be no difference in resource management for the two alternatives.

AMENDMENT EIGHT
DESIGNATE THE CINDER CONES NNL AN NNL/ACEC

Alternative A: Adopt Amendment

Geology-Energy-Minerals (G-E-M)

The unique cinder cones will gain protection through management actions prescribed by the EMNSA Plan. These include: continuing the existing mineral withdrawal and increasing the area withdrawn by 15,320 additional acres; acquiring additional State land through exchange; closing several routes to vehicle access; and limiting the extraction of mineral materials to that required by local governments.

Management would be the same with or without ACEC designation. ACEC status would, however, provide priority for funding special protective actions where necessary.

Recreation

Designation as an ACEC could have a minor benefit by calling attention to the area's many recreational attractions and providing increased funding for interpretation and education for visitors.

All Other Resources

Same effect as for Geology-Energy-Minerals.

Alternative B: Reject Amendment (No Action)

All Resources

Management of all resources would be as prescribed in the EMNSA Plan or the same as those described for Alternative A. Except for the minor potential benefit to visitor interpretation and education provided by ACEC status, there would be no difference in resource management for the two alternatives.

AMENDMENT NINE
DESIGNATE THE GRANITE MOUNTAINS (RNA) AN RNA/ACEC

Alternative A: Adopt Amendment

Wildlife/Vegetation/Cultural Resources

Adopting the amendment would serve to further highlight the area's unique qualities but would not change present management which is based on the prescriptions of the EMNSA Plan. These include closure of several routes to vehicles, maintenance and expansion of the existing mineral withdrawal, and continuation of the Cooperative Agreement between the BLM and the University of California to jointly manage the RNA/ACEC.

Management would be the same with or without ACEC designation. ACEC status does, however, provide priority for funding special protective actions where necessary.

Recreation

One of the management prescriptions of the EMNSA Plan is to make the RNA/ACEC a no-shooting zone in order to protect researchers and recreationists. Otherwise, recreation would not be affected.

Alternative B: Reject Amendment (No Action)

All Resources

Management of all resources would be as prescribed in the EMNSA Plan or the same as those described for Alternative A. Except for the minor potential benefit to visitor interpretation and education provided by ACEC status, there would be no difference in resource management for the two alternatives. However, failure to convert this RNA to RNA/ACEC status and deletion of the RNA designation could endanger long-range ecological studies by the University of California and the BLM.

AMENDMENT TEN
DESIGNATE THE KELSO SAND DUNES ONA AN ONA/ACEC

Alternative A: Adopt Amendment

All Resources

Adopting the amendment would serve to further highlight the area's unique qualities but would not change present management which is based on prescriptions of the EMNSA Plan. The proposed ACEC would continue to be protected by a vehicle closure and by the Bureau's Interim Management Plan for Lands Under Wilderness Review (IMP).

Management would be the same with or without ACEC designation. ACEC status does, however, provide priority for funding special protective actions where necessary.

Recreation

ACEC designation would not change recreation opportunities or use of the area which is already protected by a vehicle closure and by the Bureau's Interim Management Policy for Lands Under Wilderness Review (IMP).

Alternative B: Reject Amendment (No Action)

All Resources

Without ACEC status, the Kelso Dunes would have less priority for funding special protective actions, if any were necessary. However, present management under the guidelines of the EMNSA Plan and the Interim Management Policy for Lands Under Wilderness Review and continuation of the vehicle closure and mineral withdrawal will adequately protect the outstanding values of this area. If Congress should not designate the area as wilderness, the Bureau would immediately reconsider ACEC status.

AMENDMENT ELEVEN
DESIGNATE THE TURTLE MOUNTAINS NNL AN NNL/ACEC

Alternative A: Adopt Amendment

Wildlife/Vegetation/Cultural Resources

The long-time vehicle closure and the management of this area under the Bureau's Interim Management Policy for Lands under Wilderness Review have protected this area for many years. An ACEC management plan would identify additional measures for protecting critical resources in addition to measures already established.

Recreation

ACEC designation would not change recreation management or use of the area. The ACEC management plan may lead to increased interpretative and educational efforts.

Geology-Energy-Minerals (G-E-M)

Mineral exploration and development in this area is presently under the guidance of the Bureau's Interim Management Policy for Lands Under Wilderness Review. Adding ACEC status would not affect mining except to call further attention to the area's unique qualities and need for protection.

Wilderness

There would be little or no effect on WSA 307, since this area is already protected by a vehicle closure.

Alternative B: Reject Amendment (No Action)

All Resources

Condition and management of resources would be unchanged. However, failure to establish an ACEC would leave this unique area without the special priority given ACECs. If the Congress does not approve wilderness status for WSA 307, it might be necessary to reconsider ACEC designation.

AMENDMENT TWELVE
DESIGNATE THE DESERT LILY PRESERVE AN ONA/ACEC

Alternative A: Adopt Amendment

Vegetation/Cultural Resources

Since the Desert Lily Preserve has been surrounded by a fence for several years, adoption of the amendment would not affect protection of either vegetation or cultural resources. However, ACEC status would call attention to the valuable resources and their need for protection.

Recreation

ACEC status would not affect recreation in this area.

Geology-Energy-Minerals (G-E-M)

ACEC designation would not affect mineral exploration or development, since the area has been withdrawn from mineral entry since 1967.

Alternative B: Reject Amendment (No Action)

Failure to designate an ACEC would not affect vegetation, cultural resources, minerals, or recreation.

AMENDMENT THIRTEEN
DESIGNATE A PORTION OF THE IMPERIAL DUNES NNL AN NNL/ACEC

Alternative A: Adopt Amendment

Wildlife/Vegetation

The boundaries of the proposed ACEC are currently included within a WSA and a vehicle closure. Adopting the amendment would serve to further highlight the area's unique ecological situation but would not increase administrative protection to sensitive resources.

Recreation

The Imperial Sand Dunes Recreation Activity Management Plan (1987) provides a great deal of protection to the area through closure to vehicle recreation. The Bureau's Interim Management Policy For Lands Under Wilderness Review provides additional protection. ACEC designation would not change recreation opportunities, management, or use of the area, but it would be another designation to indicate that the Dunes require special management and consideration.

Geology-Energy-Minerals (G-E-M)

Mineral exploration and development in this area is presently under the guidance of the Bureau's Interim Management Policy for Lands under Wilderness Review. Adding ACEC status would not affect mining except to call further attention to the area's unique qualities and need for protection.

Alternative B: Reject Amendment (No Action)

Wildlife/Vegetation

The level of protection the area's resources receive under interim management and vehicle closure would not be affected.

Recreation

Recreation opportunities and use would not be affected, since both the Imperial Sand Dunes Recreation Activity Management Plan (1987) and the Interim Management Policy and Guidelines for Lands under Wilderness Review address the area's need for special management consideration.

Geology-Energy-Minerals (G-E-M)

Mineral resources within the proposed ACEC would not be affected.

AMENDMENT FOURTEEN
CHANGE TWO PARCELS IN PIPES CANYON FROM "L" TO "UNCLASSIFIED"

Alternative A: Adopt Amendment

Land Use

The change in multiple-use class from "L" to "unclassified" would make these two isolated parcels available for sale or exchange. The action would be consistent with the long term management of this general area and not adverse to any known resource value.

Geology-Energy-Minerals (G-E-M)

Under the land use designation of "unclassified," a notice would be required for mining activity other than casual use, instead of the plan of operations required for Class "L". This would speed up mining but would remove the minor benefit of the plan of operations in allowing time for public disclosure. There would be no effect on mineral resources.

Alternative B: Reject Amendment (No Action)

Land Use

There would be no effect. The two parcels which would remain classified as MUC "L" would be difficult to manage, due to their geographical isolation. These parcels would not be available for sale or exchange.

Geology-Energy-Minerals (G-E-M)

There would be no effect. A plan of operations would still be necessary for mining activity other than casual use, causing a slight delay in authorization.

AMENDMENT FIFTEEN
CHANGE MUC OF 10.5 SECTIONS IN ARROYO SALADA OPEN AREA FROM "I" TO "M"

Alternative A: Adopt Amendment

Wildlife/Vegetation

Since this change is proposed on behalf of the California Department of Parks and Recreation (CDPR), which intends to continue the current use of this area as a vehicular recreation park, there would be the same negative effects on wildlife and vegetation that would occur under BLM management. Heavy OHV use could result in a loss of vegetation and decreased habitat due to vegetation loss and burrow collapse.

If this transfer should not occur, wildlife and vegetation would benefit, since the area would be managed according to Class "M" guidelines.

Cultural Resources

The proposed change in MUC is administrative in nature and will not affect cultural resources. However, any future transfer of lands to the State of California could result in impacts to any cultural resources on the subject lands. Prior to completion of such a land transfer, the BLM will first meet agency obligations set forth in regulations at 36 CFR 800. Specifically, a process will be developed for the inventory, evaluation, and treatment of any significant resources on the affected lands, in consultation with the State Historic Preservation Officer and the President's Advisory Council on Historic Preservation, as appropriate.

Geology-Energy-Minerals (G-E-M)

The class change would not affect mining or leasing regulations. The subject lands would continue to be open to mining, leasing, and mineral sales. However, mineral exploration would continue to compete with recreational vehicle use for access.

Recreation

If the State Department of Parks and Recreation acquires this land and carries out its intended expansion of the Ocotillo Wells SVRA, there should be no effect on recreation for the short-

term, since the use of the newly acquired land would not change. However, as the checkerboard land is consolidated into one large SVRA, open use would probably increase and motorized vehicle vehicle recreationists would benefit.

On the other hand, if the SVRA does not develop and the land remains under BLM management as Class "M," the effect on vehicle recreation would be negative, since under this designation, vehicle access is allowed only on existing routes of travel instead of the unlimited access permitted under the Class "I" status.

Soils/Vegetation

The long-term effect of full development of an SVRA by the State Parks and Recreation Department would be the usual effects of heavy OHV use. This would include compaction of soils and erosion from run-off and wind. There would be a loss of vegetation, decreased habitat due to vegetation loss, and increased air pollution through wind-blown sand and dirt.

Alternative B: Reject Amendment (No Action)

Wildlife/Vegetation

Resource management would be unchanged. Off-highway vehicle use would continue to be the main activity in the amendment area. Impacts to habitats and disturbance of wildlife and vegetation would continue at present levels.

Cultural Resources

Management of any existing archaeological sites would continue as it is at the present.

Recreation

Recreational opportunities would remain the same as under current management.

Geology-Energy-Minerals (G-E-M)

There would be no change.

AMENDMENT SIXTEEN
EL MIRAGE: CHANGE MUC AND VEHICLE ACCESS

Alternative A: Adopt Amendment

Motorized Vehicle Access

Adoption of the changes proposed for the El Mirage Cooperative Management Area would provide a basis for resolution of the long-time conflict over motorized vehicle use in an area of mixed public and private land ownership. These proposed changes reflect a compromise between recreationists and residents of local communities.

Recreationists would benefit by having approximately 24,400 acres of public land within the Management Area available for OHV play and other recreational pursuits. (This includes 12,000 acres which the BLM would acquire through future land acquisition.) A wide variety of terrains would provide outstanding opportunities for a range of recreational experiences. Outside the Management Area, there would be a loss of OHV play opportunities on public land. All public land within the amendment area but outside of the Management Area would have limited vehicle access.

Socio-Economic

Approval of this amendment would benefit private landowners outside the Management Area by providing BLM the authority to restrict OHV play in their areas. Upon implementation, legitimate opportunities for OHV and related recreation would be secured and available for the long-term within the boundaries of the Management Area. The effect would be to reduce trespass, provide a designated area for recreation and tourism, retain open space in a growing urban area, and allow for commercial activities such as product testing and filming. A long-standing conflict between recreationists and local residents would be resolved.

Recreation

Recreational opportunities in the Management Area would benefit from the acquisition and designation of lands. All existing activities would experience a major benefit except shooting, which would be banned. OHV play opportunities would be restricted in the area surrounding the Management Area.

Wildlife

Within the Management Area, the change of vehicle access to "open" would increase the potential negative impact on wildlife, including the desert tortoise and the Mohave ground squirrel. This impact would increase as the private land was purchased by the BLM and designated "open", as recommended in the Management Plan. In spite of this use, the natural habitat and vegetation will remain mostly intact. It is likely that the 24,000-acre Management Area will eventually become an island of native habitat in a highly urbanized area.

In the portion of the amendment area surrounding the Management Area, limiting vehicle access on 9,000 acres of public land would have a positive effect on wildlife by reducing the amount of habitat that is readily accessible by vehicle and directly impacted by OHV play. Approximately 3,200 acres of this land will remain available for disposal, and with continuing urbanization, the beneficial effect could reverse, since development may eventually result in total loss of native habitat.

The BLM has completed consultation with the U.S. Fish and Wildlife Service on the El Mirage Management Plan in regard to potential impacts on the desert tortoise. Appropriate mitigating measures were outlined in the final management plan. Inventories will also be conducted to determine if the Mohave ground squirrel is present and the actual extent of any populations. Potential impacts on the squirrel will be mitigated with input from the California Department of Fish and Game.

Vegetation

The Management Area has been receiving extensive use for over 30 years, and all plant species appear to be reproducing at a level sufficient to maintain viable populations.

Although an extensive network of vehicle routes exists within the Management Area, new routes will continue to be developed. This will result in the loss of some individual plants along trails and in popular camping areas. These impacts within the Management Area will be offset by a decrease in vehicular impacts on vegetation outside the Management Area where public access will be limited. As indicated in the section on wildlife, the benefits of limiting access to scattered public lands may be reversed later when these lands are disposed of, or when expected urbanization and loss of native vegetation occurs. The Management Area may become a refuge for many wildlife species which require native vegetation but can co-exist with OHV recreation.

Cultural Resources

There could be a minor benefit to cultural resources. Implementation of the Management Plan would include inventorying and recording resources and protecting them through barriers, vehicle closures, or route designation. This would be done on existing public land and to parcels of private land prior to their acquisition.

Minerals

Mineral exploration and development would continue to be permitted on the public lands affected by changes in multiple-use class and vehicle access.

Alternative B: Reject Amendment (No Action)

Motorized Vehicle Access

In the short-term, existing recreational opportunities would continue to be available on the 1,250 acres of lakebed. However, there is no legal access to the lakebed and BLM would be unable to manage this situation. Trespass on private land would continue.

If recreation problems arose again, there would be a concerted effort by the local communities to close the area (including the lakebed) to all recreation. Local residents have been demanding a solution to the present problems for several years. Furthermore, the current pattern of subdivision and zoning of the land into small tracts indicates that higher density residential development may occur in the future. Development immediately adjacent to the lakebed would not be compatible with the existing recreational uses. Without the acquisition of private land on and around the lakebed, existing recreational uses would be displaced as private land was developed and as public land in the surrounding area was disposed of.

Socio-Economic

All of the 9,000 acres of public land now designated "unclassified" would remain available for disposal, whereas in Alternative A, although both Class "M" and unclassified lands are technically available, only the latter are recommended for disposal. In the long term, the disposal of public land in the El Mirage and Shadow Mountain area would provide additional land to the local tax base. Once the land was privately developed, the El Mirage area would realize a minor positive

benefit from additional tax revenue. On the other hand, the loss of recreation-related businesses would have a moderate negative effect, since it is estimated that the Management Area would have the capacity for several hundred thousand visitors each year, with the potential for generating thousands of dollars in local revenue from recreation-related services.

Without BLM's active presence, landowners would have to resolve the trespass issue on their own. All of the problems associated with unmanaged recreation would again resurface. Eventually, the area would be developed by private interests, and all existing recreation-related opportunities would be displaced. The Interagency Agreement (signed in 1988 by the State of California Department of Parks and Recreation, the OHMVR Commission, the Counties of San Bernardino and Los Angeles, and the BLM) would have to either be dissolved or rewritten to reflect new circumstances.

Recreation

The ultimate closing of the El Mirage and Shadow Mountain area, which could eventually result from rejection of this amendment, would displace approximately 110,000 visitors per year. The area to which this OHV play would be transferred is unknown, but the demands for this type of recreation would not disappear. In all likelihood, the use would be displaced to inappropriate places throughout the California desert.

Recreation activities other than OHV play would also be negatively impacted. The lakebed serves as the setting for the recreational use of ultra-light aircraft, landsailors, model airplanes, and vehicle land speed trials. These activities require large open space and a hard-packed surface. There are no alternative sites available in Southern California that are capable of providing the opportunities found at El Mirage.

Wildlife

The entire area, and perhaps even the dry lakebed, would likely be transferred by sale or exchange to the private sector and then developed. All native habitat could be lost. Under private ownership, it would not be necessary to mitigate for the low number of desert tortoises probably present on this land..

Vegetation

Approximately 12,000 acres would remain private and would probably eventually be cleared of all native vegetation for development. Approximately 20,000 acres of public land within the entire amendment area would remain available for disposal.

Cultural Resources

Existing resources would continue to receive impacts. Potential long term loss and impacts would continue.

Minerals

In the long term, there would be a negative effect on mining operations. Approximately 20,000 acres of public land would remain available for urban development, which could result in the loss of opportunity for mineral entry in the entire amendment area.

AMENDMENT SEVENTEEN
DELETE PALEN GRAZING ALLOTMENT

Alternative A: Adopt Amendment

Range Management

There would be no adverse impact to the present range management, because no grazing has been authorized in the allotment since its designation in the CDCA Plan.

Wildlife

Recent studies (Bunch et al. 1988, DeForge et al. 1988, Jessup et al. 1988) have indicated bighorn sheep are highly susceptible to specific pathogenic organisms carried by domestic sheep. Elimination of domestic sheep grazing within Palen Allotment would avoid the possibility of disease exposure to bighorn sheep.

Cultural Resources

Prohibiting grazing in Palen Allotment would benefit the Palen Dry Lake ACEC by lowering the potential for trampling of artifacts. Camp Coxcomb of the Desert Training Center will not be affected by this alternative.

Vegetation

There would be no effect on vegetation under the present drought conditions. In conditions improve, there would be a benefit to perennial vegetation.

Alternative B: Reject Amendment (No Action)

Range Management

When conditions meet established criteria for grazing in this ephemeral allotment, a lease could be approved after proper application.

Wildlife

The California Department of Fish and Game would be hesitant about reintroducing bighorn sheep into the Palen Mountains or augmenting the Granite Mountains herd, due to the presence of the disease hazard. Lack of augmentation would probably result in the eventual dieoff of the Granite Mountains herd.

Cultural Resources

The potential for damage to portions of the Palen Dry Lake ACEC would continue. There would be no change in the status of Camp Coxcomb.

AMENDMENT EIGHTEEN
DELETE RICE VALLEY EPHEMERAL GRAZING ALLOTMENT

Alternative A: Adopt Amendment

Range Management

Deletion of the allotment would prevent potential future grazing in this area. Under the present drought situation, this amendment would not effect range management, since grazing has not been authorized here since the 1970's. However, an 8-year lease has been issued, and the lessee wishes to graze the allotment when conditions warrant. Due to the heavy rains in March 1991, grazing was feasible this year and would be in the future, depending upon the yearly rainfall.

Wildlife

Recent studies have indicated that bighorn sheep are highly susceptible to specific pathogenic organisms carried by domestic sheep (Bunch et al. 1988, DcForge et al. 1988, Jessup et al. 1988). Elimination of domestic sheep grazing within the Rice Valley Allotment would protect bighorn from possible disease transmission while within the allotment. However, thay would continue to be exposed to domestic sheep grazing on private lands south of the Big Maria Mountains where winter grazing occurs, if they should migrate in that direction.

Vegetation

There would be no effect unless vegetation improves so that grazing could be reauthorized; in this case deletion of the allotment would benefit perennial vegetation.

Alternative B: Preferred (No Action)

Range Management

When conditions meet established criteria, grazing could be approved in this allotment.

Wildlife

The California Department of Fish and Game would be hesitant about reintroducing bighorn sheep into the Big Maria and Little Maria Mountains, due to the disease hazard both within and outside the allotment.

Vegetation

There should be no adverse impact on the existing vegetation.

AMENDMENT NINETEEN
DELINEATE THREE CATEGORIES FOR DESERT TORTOISE MANAGEMENT

Alternative A: Adopt Amendment (Preferred)

Wildlife

Although administrative in nature, the assignment of categories establishes priority areas for management of the desert tortoise. The environmental consequences will result from various actions implemented subsequently through CDCA Plan amendments or through habitat management plans, which the Bureau is developing for each of four regions in the California Desert. These habitat management plans and the actions prescribed in them will receive full environmental analysis.

Notwithstanding the administrative nature of the proposed action, it is the intent of the Bureau that the assignment of the categories will establish management priorities for habitat areas such that large, viable populations of desert tortoise can be maintained. The categorization shown on Map 19A will allow this goal to be met.

Alternative B: No Action

Wildlife

The Crucial Habitat areas from the CDCA Plan as proposed in this alternative do not correspond as well to Bureau management capability (e.g., land ownership patterns) as the Proposed Action (Alternative A) and are, therefore, inferior in achieving the goal of maintaining tortoise populations. In addition, the past use of township lines in establishing boundaries of the crucial habitat areas (see Map 19B) will result, subsequently, in the arbitrary application of management actions not warranted by the actual populations present.

CHAPTER 5
CONSULTATION AND COORDINATION

CHAPTER FIVE

CONSULTATION AND COORDINATION

NOTICES AND MEETINGS

The 1989 Desert Plan review was announced in a Notice of Intent in the Federal Register on January 12, 1989 (Vol. 54: No. 8, p. 251). An invitation for proposals was sent on February 8, 1989, to the Desert Plan mailing list of about 5,200 individuals, organizations, businesses, and public agencies. It listed the criteria for evaluating amendment proposals and gave the final date for submitting proposals as March 10, 1989.

Nine letters were received in response to the invitation for amendment proposals. Six proposals were offered - three by State agencies, one by a Los Angeles County agency, one by an organization, and one by an individual. These proposals were reviewed by the California Desert District Advisory Council (DAC) on June 16, 1989, at a public meeting in San Bernardino. This meeting also served as a scoping meeting for the Environmental Assessment (EA) and was announced in the Federal Register on May 24, 1989 (Vol. 54: No. 99, p. 22497).

Four of the publicly proposed amendments were recommended by the DAC for consideration in the 1989 amendment process. The remainder will be deferred for later consideration or dropped as inappropriate. Each amendment proposal and its fate is listed in Appendix D.

Three additional amendments (#s 10, 11, and 13) were added in January 1990. An announcement of this change was made in the Federal Register on January 18, 1990 (Vol. 55: No. 12, p. 1733). These three proposals addressed the reclassification of Special Areas to ACEC status.

Further public input on the amendments, particularly Amendment One, the Manix ACEC proposal, occurred at DAC meetings in Baker (October 6, 1989), Palm Springs (December 1, 1989), Temecula (March 24, 1990), and Barstow (July 28, 1990).

AGENCIES AND INDIVIDUALS CONSULTED

The following persons and agencies provided information during the preparation of the Environmental Assessment.

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Philippe Cohen	Granite Mountain Reserve, Director
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Kenneth L. Mitchell	California Department of Parks and Recreation
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Michael P. Woodburne	Society of Vertebrate Paleontology, President

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	Mike Ford	Geologist	G-E-M (1)
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	John Murray	Archaeologist	Cultural (1,2,14,16)
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ACRONYMS

ACEC	Area of Environmental Concern
AMA	American Motorcyclist Association
BLM	Bureau of Land Management
BOM	Bureau of Mines (US)
CDCA	California Desert Conservation Area
CDFG	California Department of Fish and Game
CFR	Code of Federal Regulations
CVFTL	Coachella Valley Fringe-Toed Lizard
EA	Environmental Assessment
FLPMA	Federal Land Policy and Management Act of 1976
FTHL	Flat-Tailed Horned Lizard
GEM	Geology-Energy-Minerals
HCP	Habitat Conservation Plan
HMP	Habitat Management Plan
IMP	Interim Management Policy and Guidelines for Land Under Wilderness Review
MOU	Memorandum of Understanding
MUC	Multiple Use Class
NA	Natural Area
NNL	National Natural Landmark
OHV	Off-Highway Vehicle
ONA	Outstanding Natural Area
RA	Resource Area
RAMP	Recreation Area Management Plan
SVRA	State Vehicular Recreation Area
TNC	The Nature Conservancy
UPA	Unusual Plant Assemblage
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WSA	Wilderness Study Area

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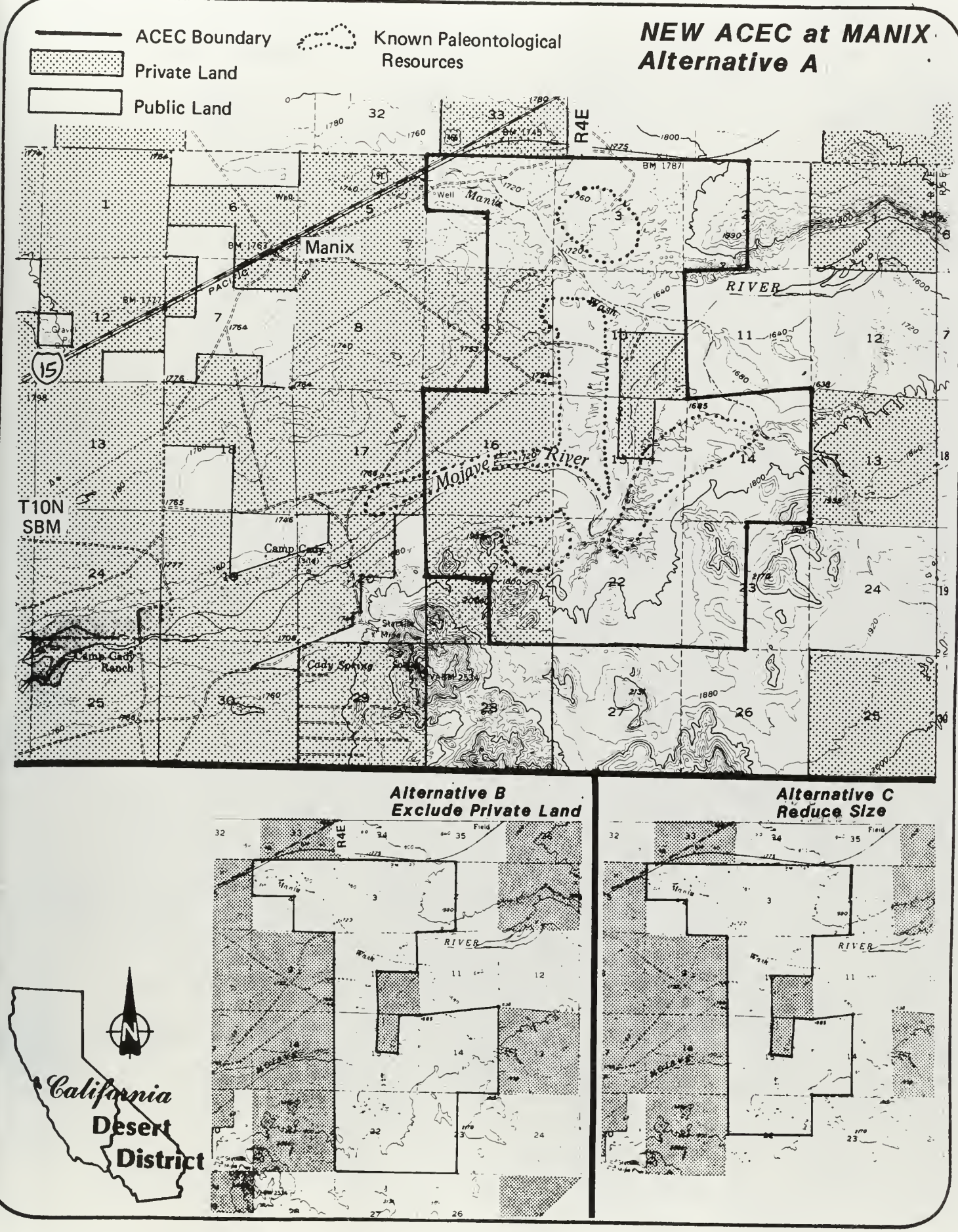
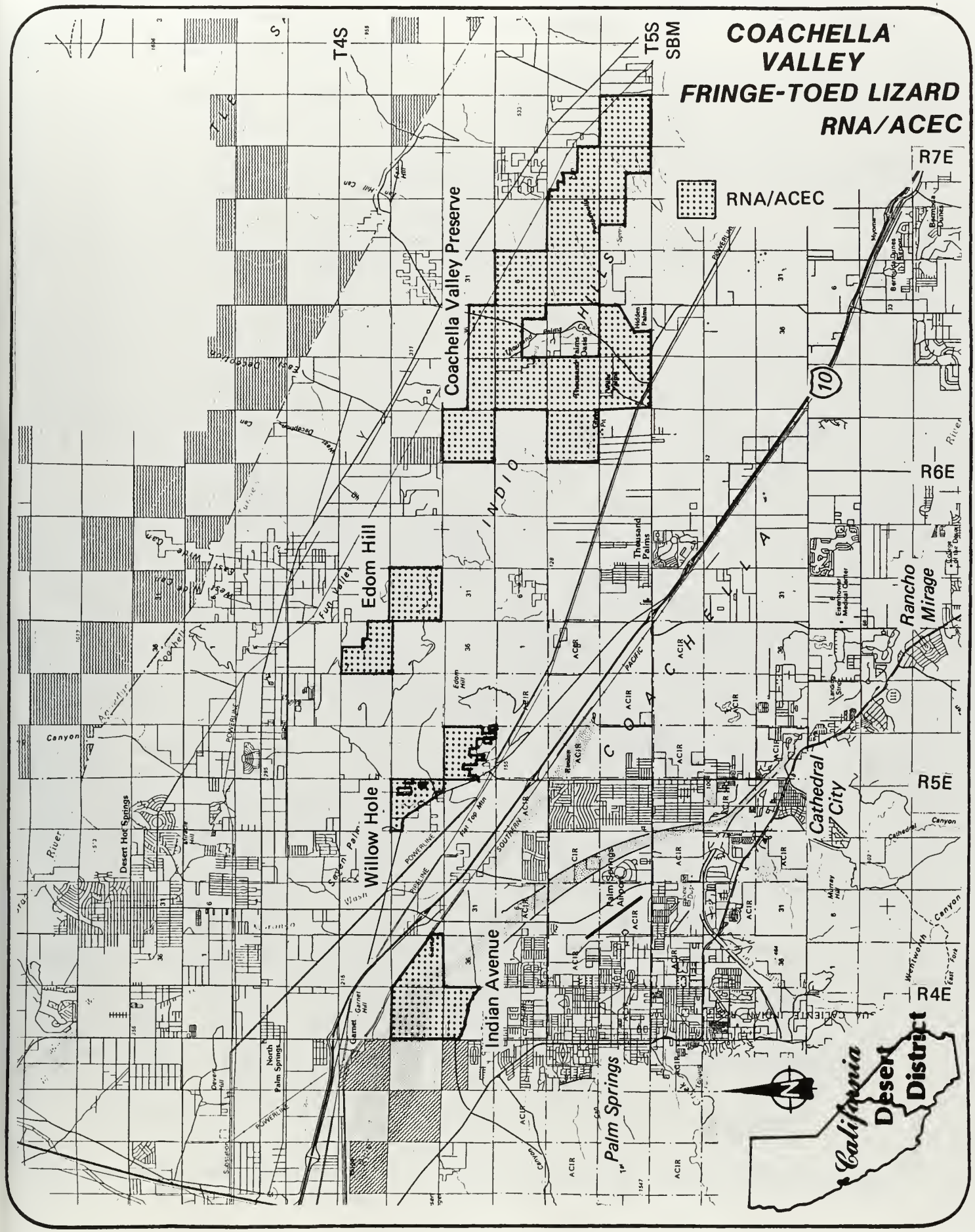
APPENDIX A

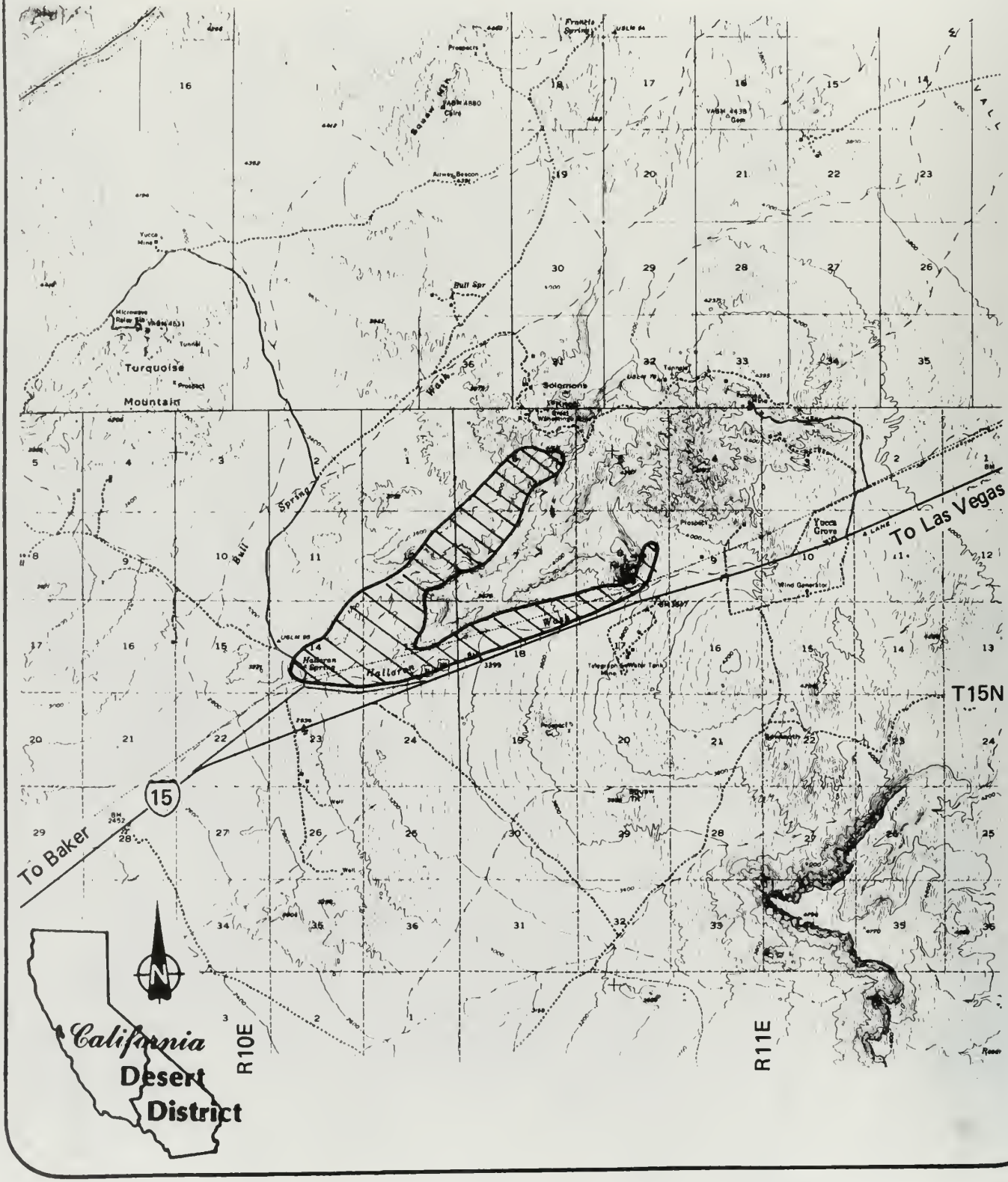
AMENDMENT MAPS

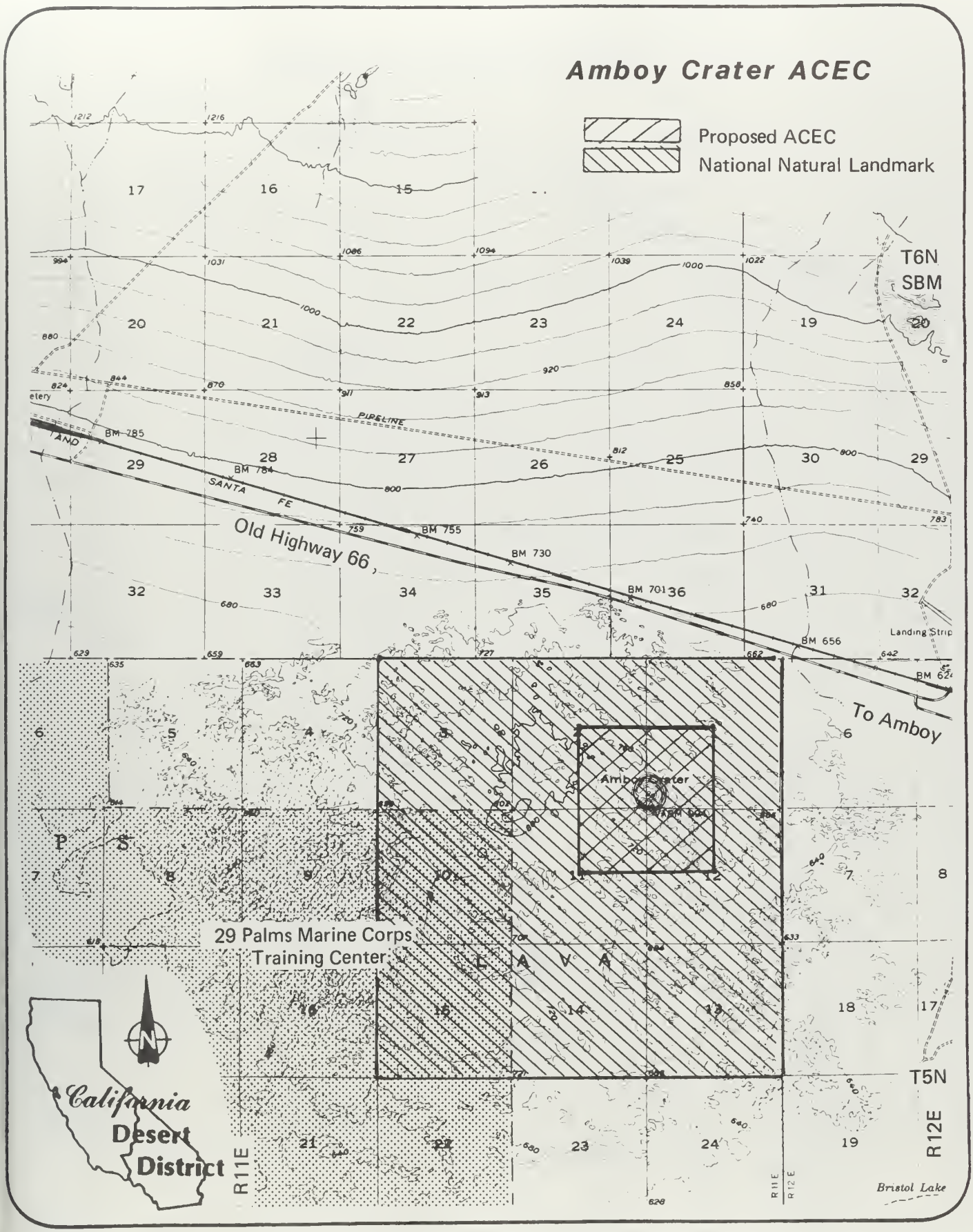

ACEC Boundary
Private Land
Public Land
Known Paleontological Resources
NEW ACEC at MANIX
Alternative A
R4E
R5E
T10N
SBM
Manix
Mojave River
Camp Cady
Camp Cady Ranch
Cady Springs
RIVER
Alternative B
Exclude Private Land
Alternative C
Reduce Size
California
Desert
District
N

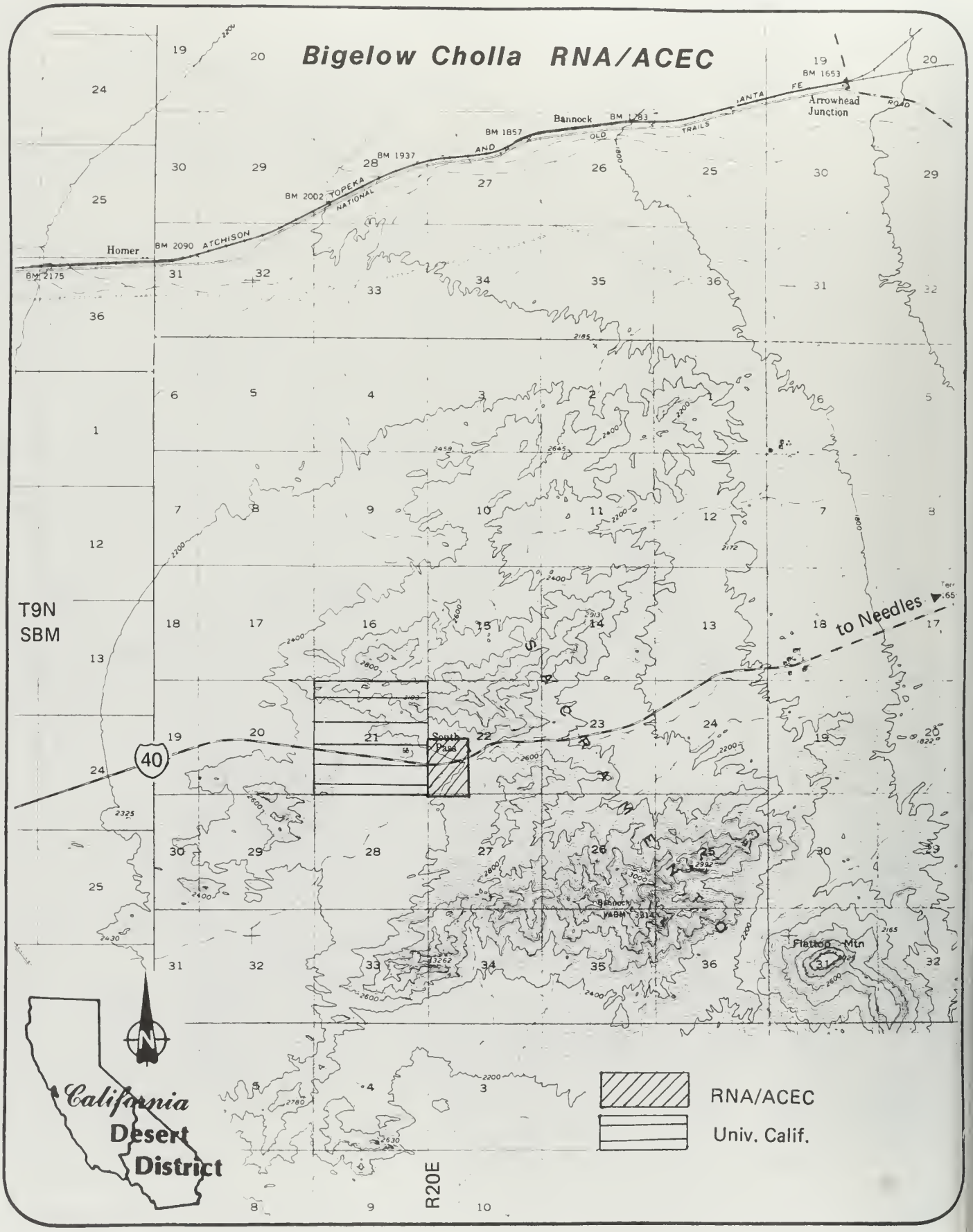
BLACK MOUNTAIN ACEC
Enlarge Boundary
Existing ACEC
Proposed Boundary
Private Land
Public Land
R46E
R45E
R44E
R3W
R2W
R4W
T31S
T32S
T12N
T11N
MDM
SBM
Black Mountain
Murphys Well
Dry Lake
Well (Dry)
Well
N
California Desert District

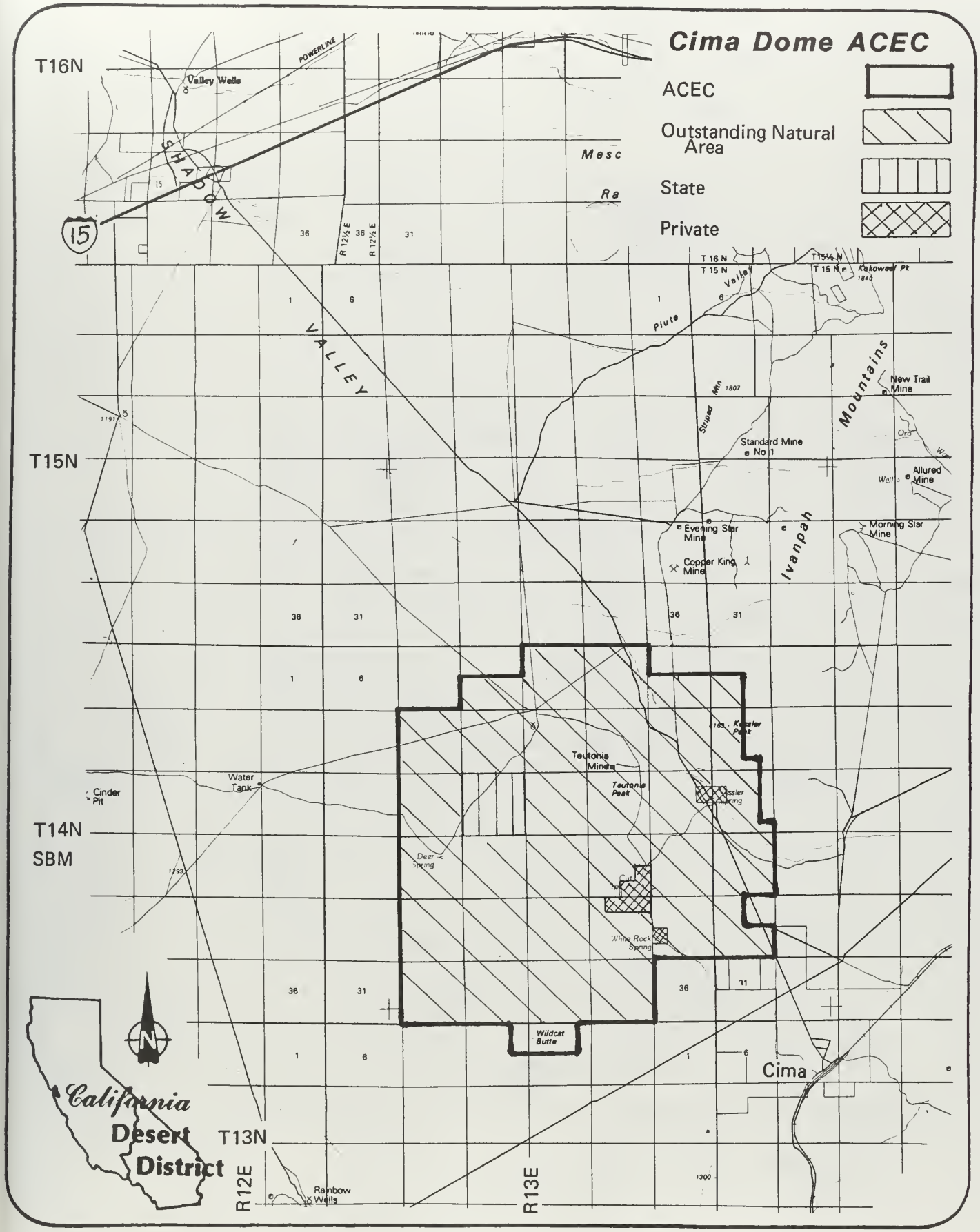

COACHELLA VALLEY FRINGE-TOED LIZARD RNA/ACEC
RNA/ACEC
T4S
T5S
SBM
R7E
R6E
R5E
R4E
Coachella Valley Preserve
Edom Hill
Willow Hole
Indian Avenue
Palm Springs
Cathedral City
Rancho Mirage
Thousand Palms
Desert Hot Springs
North Palm Springs
INDIO
COACHELLA
10
California Desert District

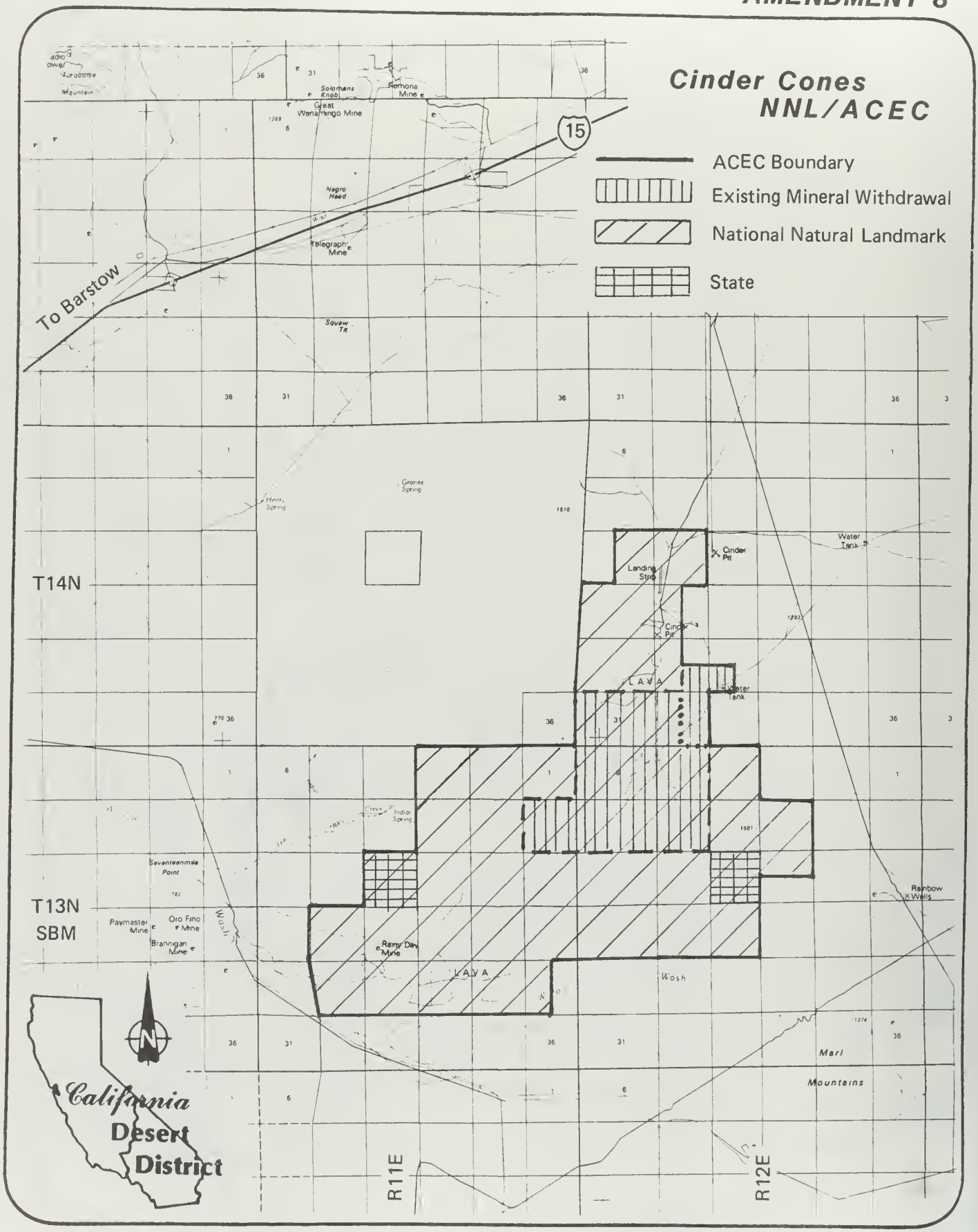
DELETE HALLORAN WASH ACEC (#29)

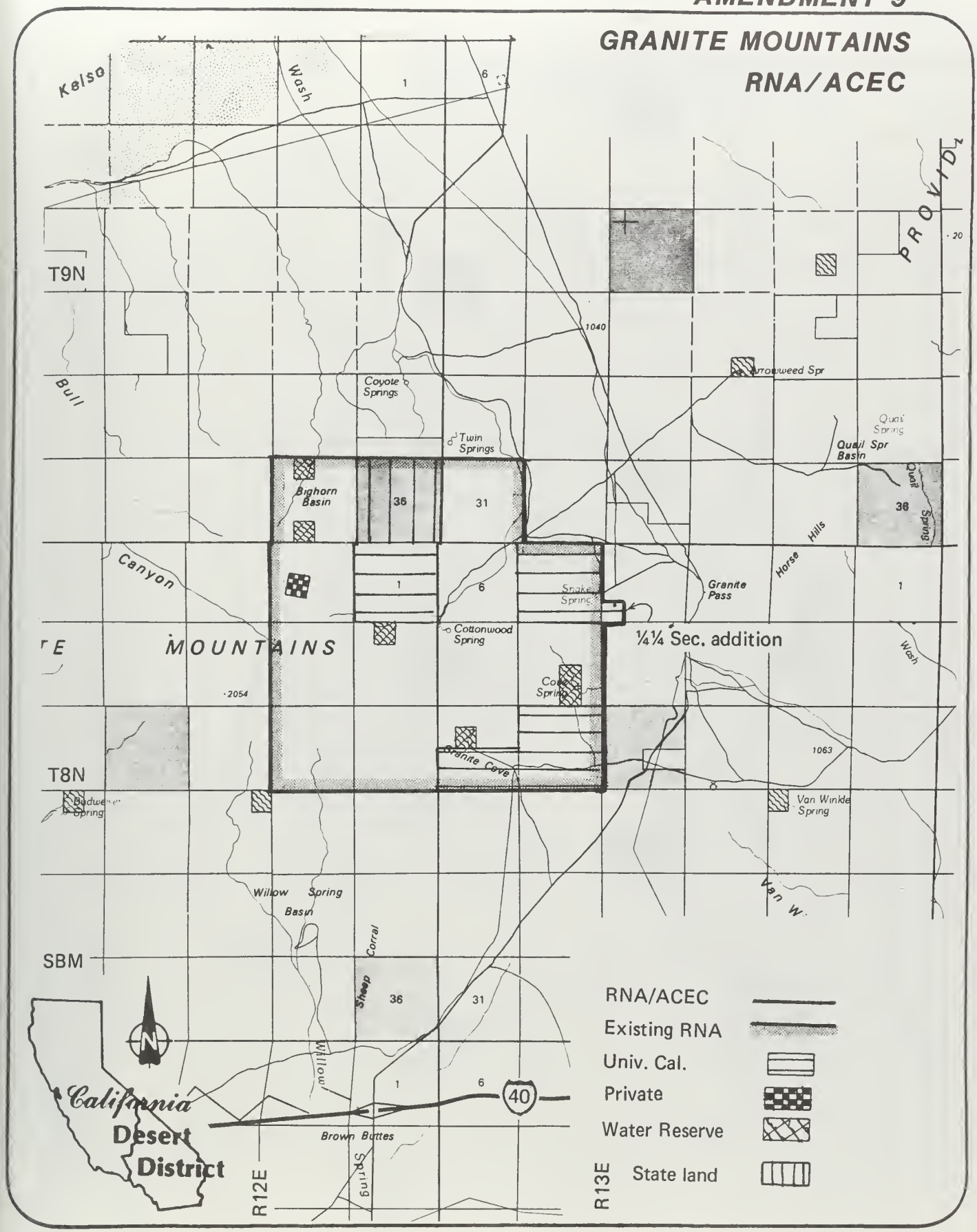


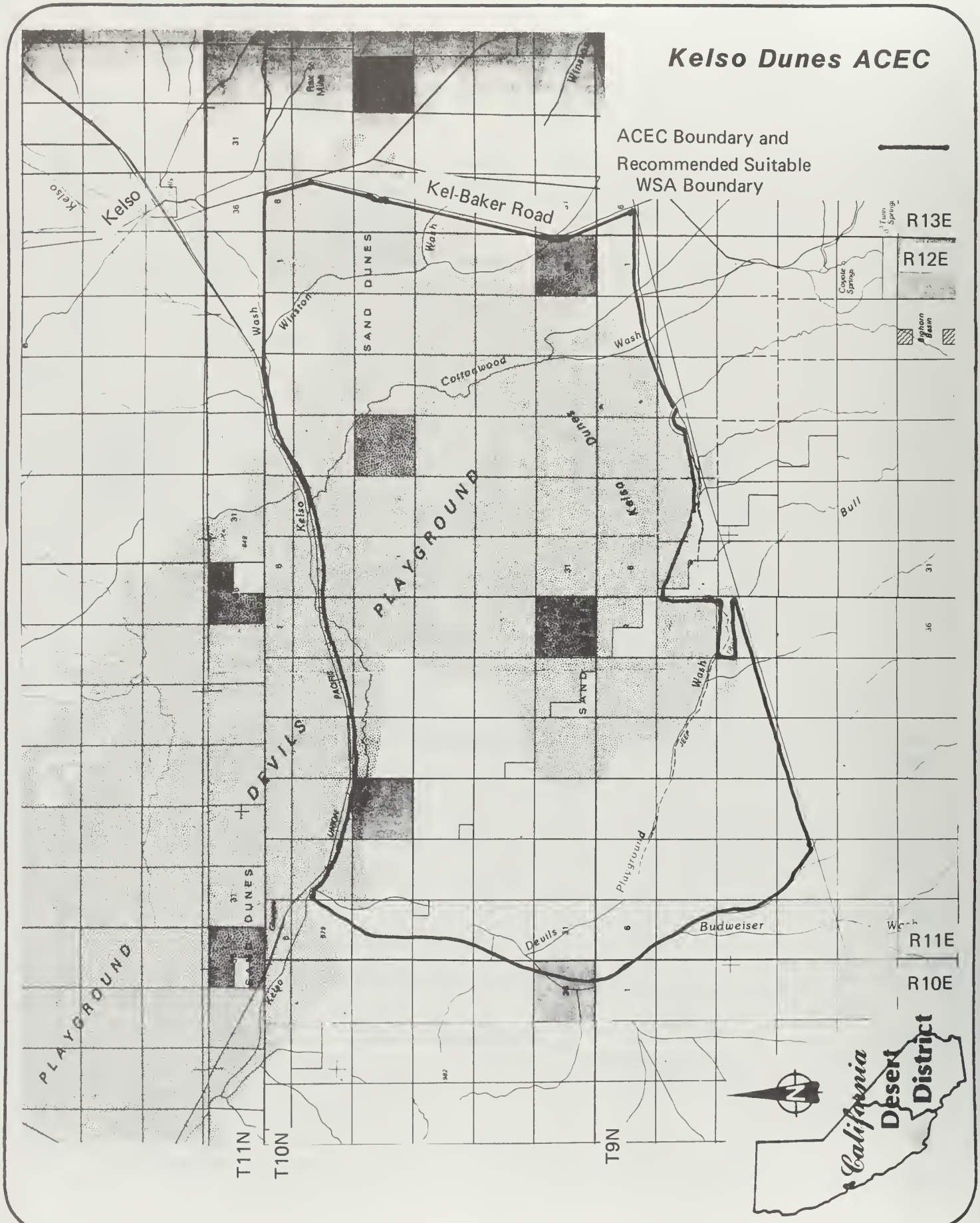

Amboy Crater ACEC
Proposed ACEC
National Natural Landmark
T6N
SBM
Old Highway 66
SANTA FE
PIPELINE
BM 785
BM 784
BM 755
BM 730
BM 701
BM 656
Landing Strip
To Amboy
Amboy Crater
29 Palms Marine Corps
Training Center
California
Desert
District
T5N
R11E
R12E
Bristol Lake


Bigelow Cholla RNA/ACEC
Homer
Bannock
Arrowhead Junction
to Needles
South Pass
Flattop Mtn
T9N
SBM
R20E
40
RNA/ACEC
Univ. Calif.
California Desert District

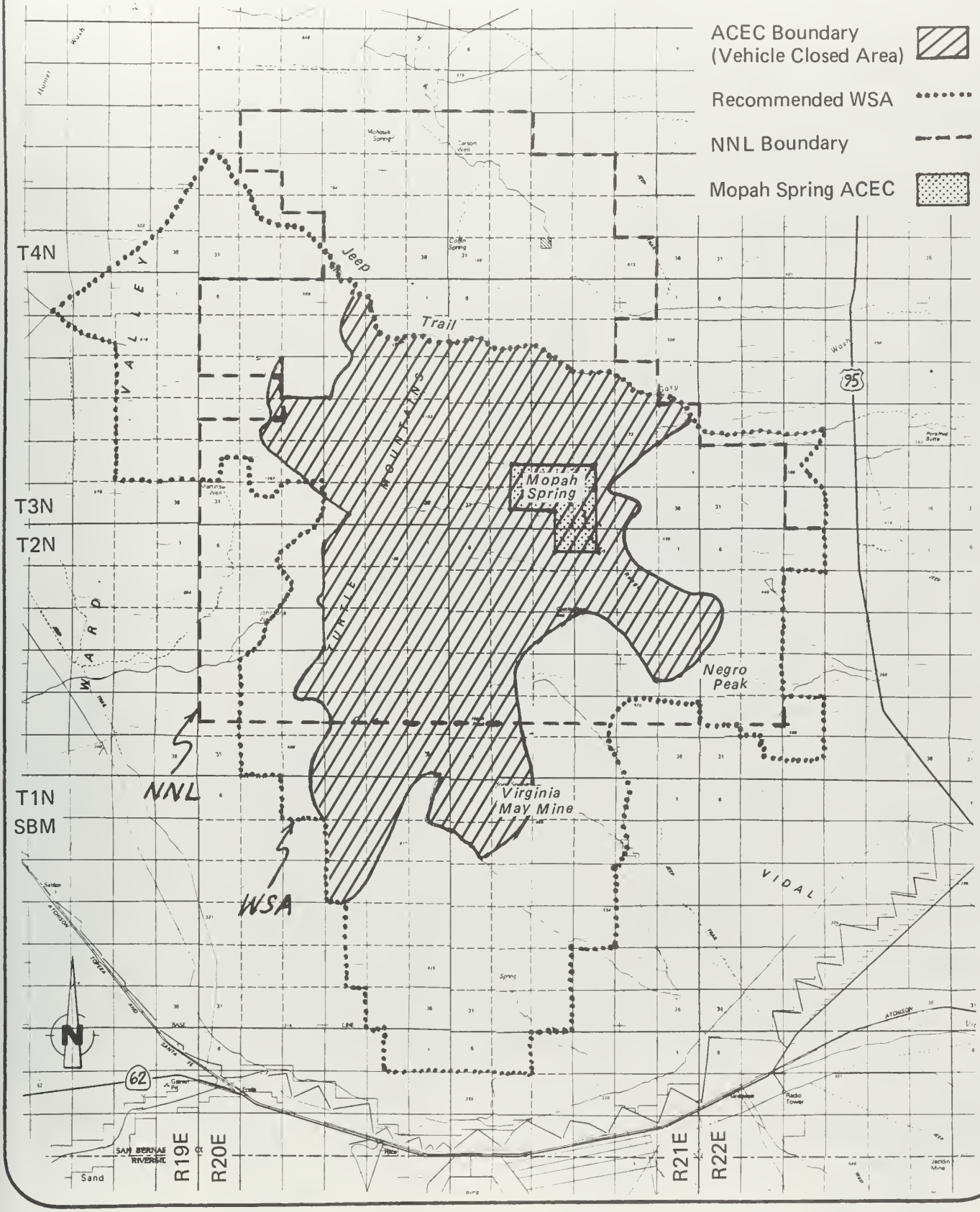

Cima Dome ACEC
ACEC
Outstanding Natural Area
State
Private
T16N
T15N
T14N
SBM
T13N
R12E
R13E
Valley Wells
POWERLINE
SHADOW
15
VALLEY
Piute
Mesc
Ra
T 16 N
T 15 N
T15½ N
T 15 N
Kokoweef Pk
1840
Valley
Striped Mtn
1807
Mountains
New Trail Mine
Standard Mine No 1
Allured Mine
Evening Star Mine
Copper King Mine
Ivanpah
Morning Star Mine
Teutonia Mine
Teutonia Peak
Kessler Peak
Water Tank
Cinder Pit
Deer Spring
Cassier Spring
White Rock Spring
Wildcat Butte
Cima
Rainbow Wells
California Desert District
N

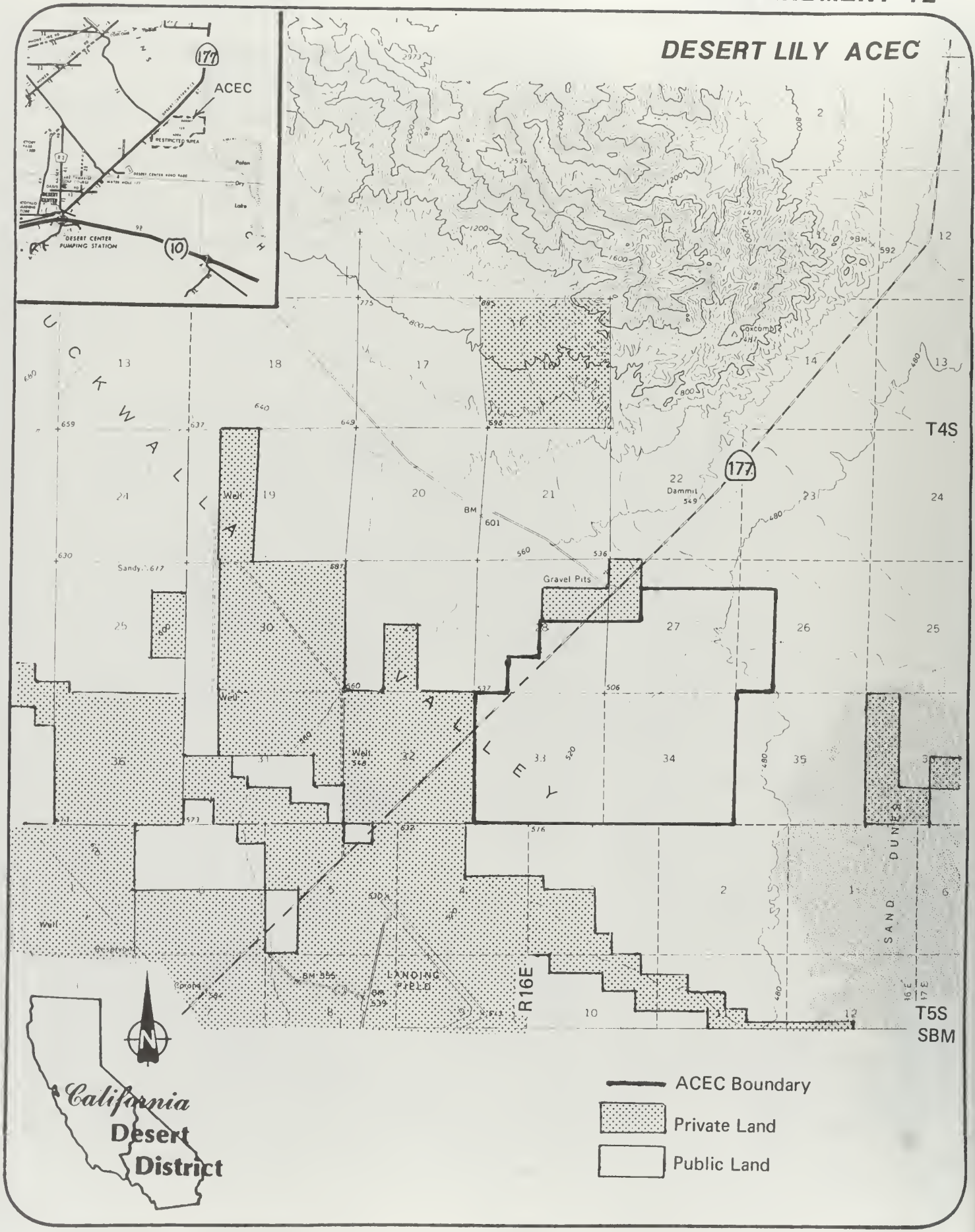

Cinder Cones
NNL/ACEC
ACEC Boundary
Existing Mineral Withdrawal
National Natural Landmark
State
To Barstow
15
Solomons Knob
Ramona Mine
Great Wenahingo Mine
Negro Head
Telegraph Mine
Squaw Tit
Granite Spring
Hemt Spring
Landing Strip
Cinder Pit
Water Tank
LAVA
Indian Spring
Seventeenmile Point
Paymaster Mine
Oro Fino Mine
Brannigan Mine
Remy Dev Mine
Wash
Rainbow Wells
Marl Mountains
T14N
T13N
SBM
R11E
R12E
California Desert District


GRANITE MOUNTAINS
RNA/ACEC
Kelso
Wash
T9N
Bull
Coyote Springs
Twin Springs
Bighorn Basin
36
31
1040
Arrowweed Spr
Quail Spr Basin
Quail Spring
Hills
Horse
Granite Pass
Canyon
Snake Spring
Cottonwood Spring
¼¼ Sec. addition
MOUNTAINS
·2054
Granite Cave
T8N
Van Winkle Spring
Willow Spring Basin
Corral
Sheep
Willow
SBM
Brown Buttes
Spring
R12E
R13E
40
California Desert District
RNA/ACEC
Existing RNA
Univ. Cal.
Private
Water Reserve
State land

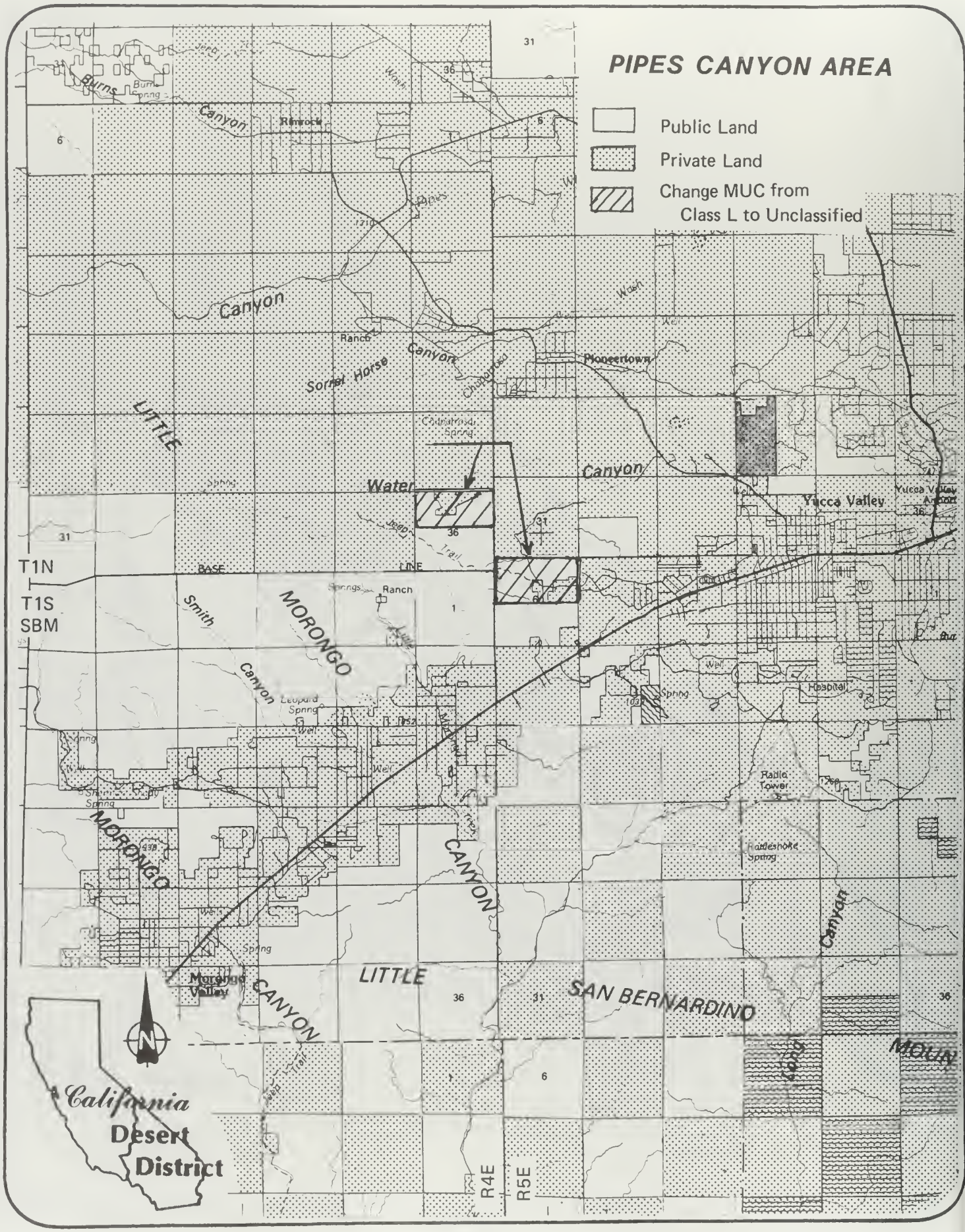

Kelso Dunes ACEC
ACEC Boundary and
Recommended Suitable
WSA Boundary
Kel-Baker Road
Kelso
Wash
SAND DUNES
Winston
Cottonwood
PLAYGROUND
DEVILS
PLAYGROUND
SAND DUNES
Bull
Budweiser
Playground
Devils
R13E
R12E
R11E
R10E
T11N
T10N
T9N
California Desert District

Turtle Mountain ACEC

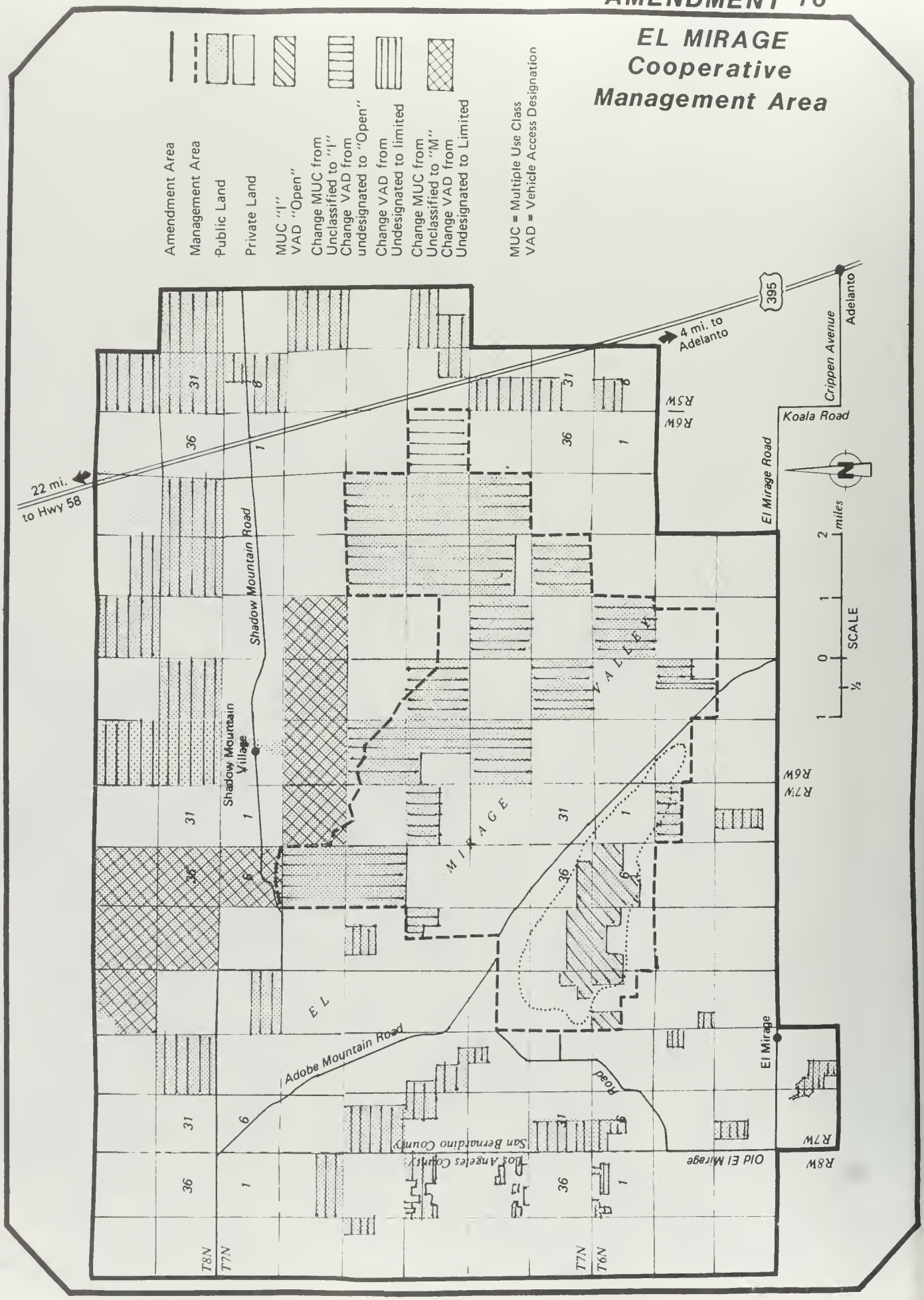


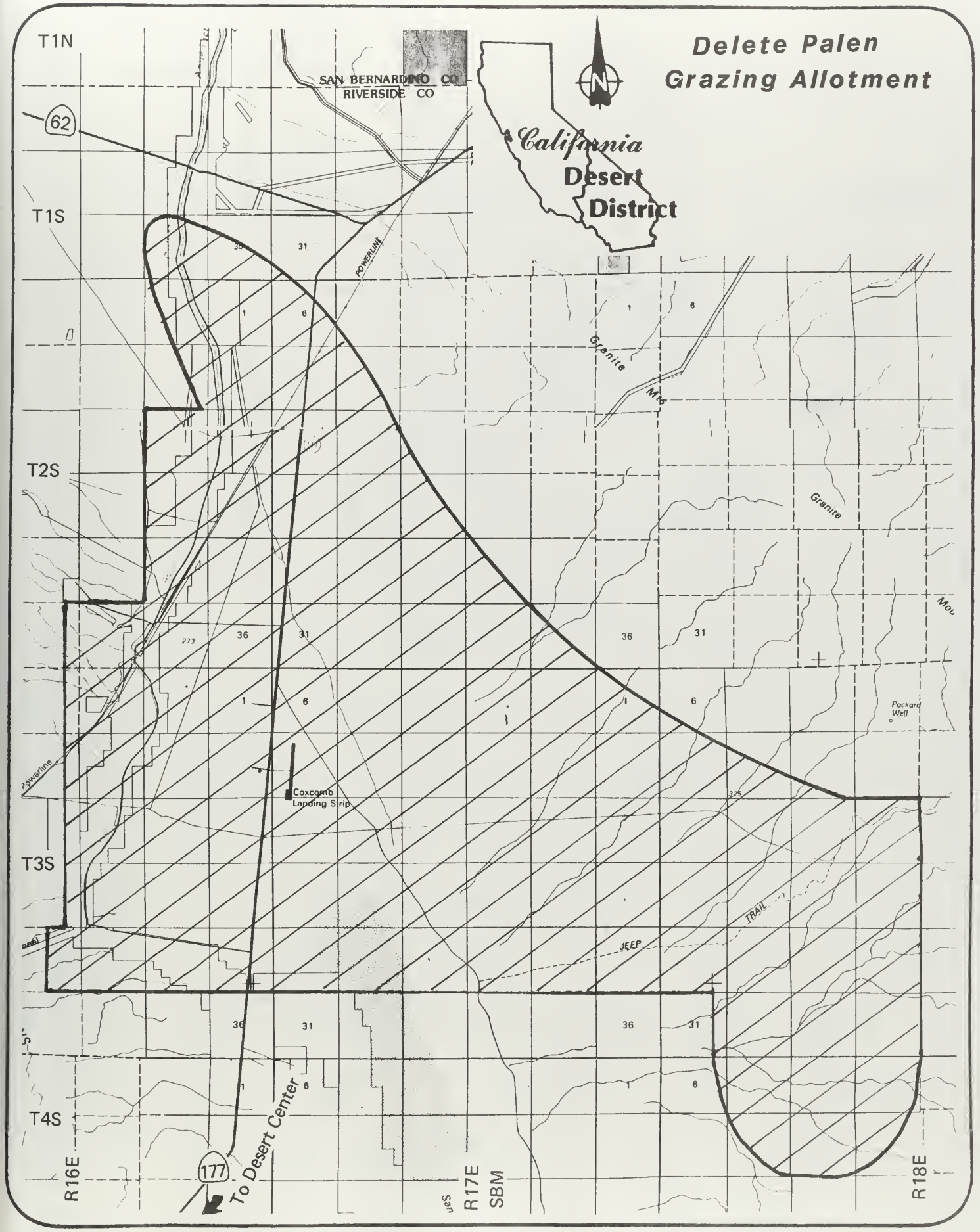

DESERT LILY ACEC
ACEC
177
10
DESERT CENTER PUMPING STATION
T4S
T5S
SBM
R16E
CHUCKWALLA VALLEY
SAND DUNES
LANDING FIELD
Gravel Pits
Sandy
Well
Dammit
BM
ACEC Boundary
Private Land
Public Land
California Desert District

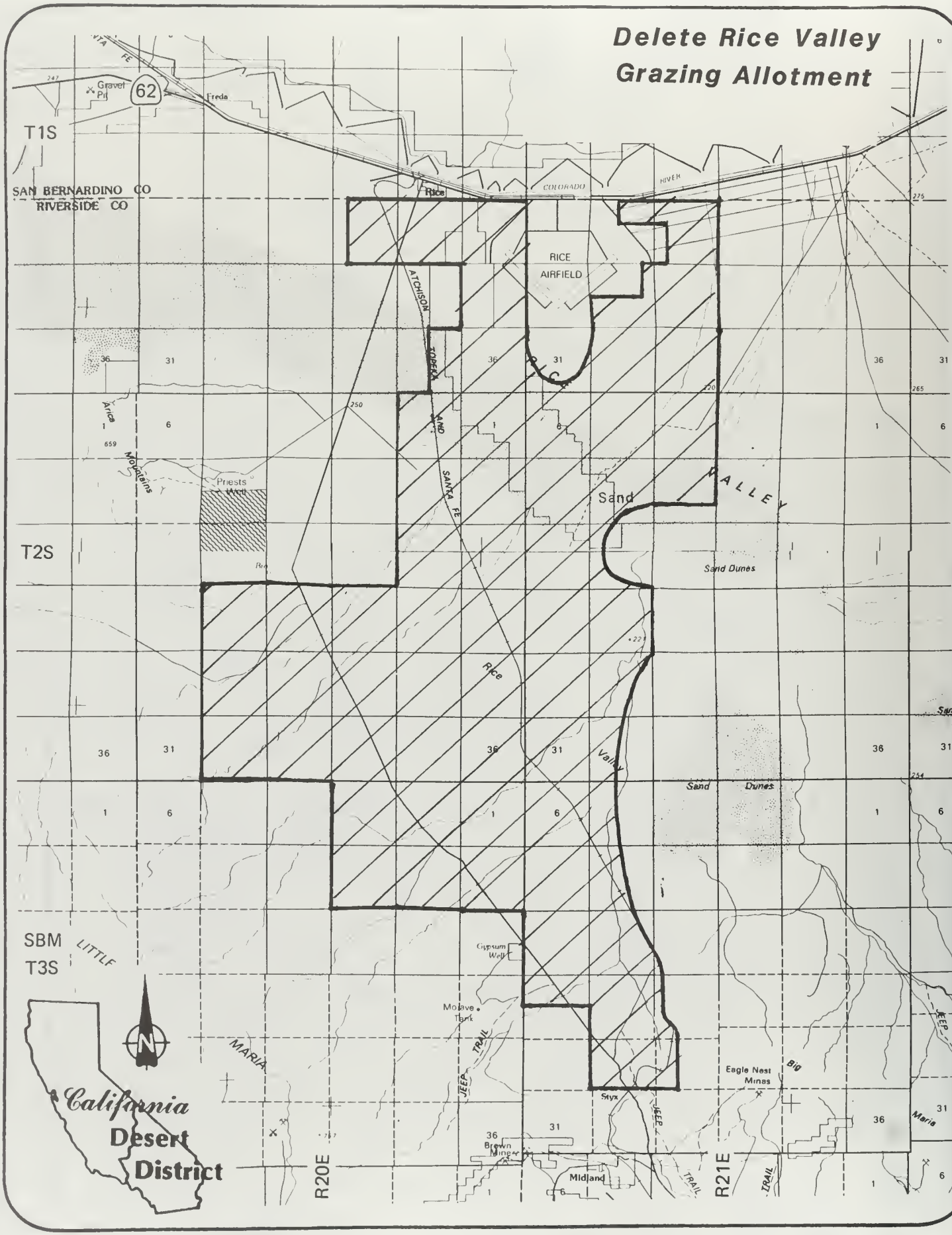
IMPERIAL DUNES ACEC
ACEC
National Natural Landmark
Mammoth Wash Open Area
Private Land
Public Land
Glamis-Gecko Open Area
Niland-Glamis Road
New Coachella Canal
Old Coachella Canal
Hwy 78
Navy Target Area 95
R18E
R17E
R16E
T12S
SBM
T13S
California Desert District


PIPES CANYON AREA
Public Land
Private Land
Change MUC from Class L to Unclassified
T1N
T1S
SBM
BASE LINE
MORONGO
CANYON
LITTLE
SAN BERNARDINO
Yucca Valley
Pioneertown
Morongo Valley
Burns Canyon
Pipes Canyon
Water Canyon
Smith Canyon
Leopard Spring
Horsethief Spring
Radio Tower
Hospital
Ranch
California Desert District
R4E
R5E

Arroyo Salada Open Area
Change MUC of Arroyo Salada Open Area from I to M
Amendment Boundary
Ocotilla Wells SVRA Expansion Area
Existing Class M
Existing Class I Change from I to M
T11S
T12S SBM
R9E
R8E
OCOTILLA WELLS VEHICULE AREA RECREATION
Ocotilla Wells County Airport
Shell Reef
Pumpkin Patch
Badlands
Ocotillo
Halfmill Lake
78
86
4WD
California Desert District


EL MIRAGE
Cooperative
Management Area
Amendment Area
Management Area
Public Land
Private Land
MUC "I"
VAD "Open"
Change MUC from Unclassified to "I"
Change VAD from undesignated to "Open"
Change VAD from Undesignated to limited
Change MUC from Unclassified to "M"
Change VAD from Undesignated to Limited
MUC = Multiple Use Class
VAD = Vehicle Access Designation
395
Adelanto
Crippen Avenue
Koala Road
El Mirage Road
4 mi. to Adelanto
22 mi. to Hwy 58
Shadow Mountain Road
Shadow Mountain Village
EL MIRAGE VALLEY
Adobe Mountain Road
El Mirage
Old El Mirage Road
San Bernardino County
Los Angeles County
SCALE
miles
T8N
T7N
T6N
R5W
R6W
R7W
R8W


Delete Palen
Grazing Allotment
California
Desert
District
N
SAN BERNARDINO CO
RIVERSIDE CO
62
T1N
T1S
T2S
T3S
T4S
R16E
R17E
SBM
R18E
177
To Desert Center
Coxcomb
Landing Strip
Granite
Mts
Granite
Packard
Well
JEEP
TRAIL
POWERLINE
powerline


Delete Rice Valley
Grazing Allotment
T1S
SAN BERNARDINO CO
RIVERSIDE CO
Gravel Pit
62
Freda
Rice
COLORADO
RIVER
RICE
AIRFIELD
ATCHISON
TOPEKA
AND
SANTA FE
Arica
Mountains
Priests
Well
Sand
VALLEY
Sand Dunes
T2S
Rice
Valley
Sand Dunes
SBM
T3S
LITTLE
Gypsum
Well
Mojave
Tank
MARIA
JEEP
TRAIL
Eagle Nest
Mines
Styx
Brown
Mine
Midland
R20E
R21E
California
Desert
District

DESERT TORTOISE HABITAT CATEGORIES

Alternative A: Preferred

DESERT TORTOISE HABITAT

- Habitat Boundary
- Category I
- Category II
- Category III
- ★ Non-Habitat

HABITAT AREAS

A Western Mojave
B Ivanpah-Kelso-Shadow
C Fenner-Chemehuevi
D Chuckwalla

CALIFORNIA
NEVADA
ARIZONA
MEXICO
Pacific Ocean

DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
PIDGECREST WEAPONS CENTER
AFB
BARSTOW
TWENTYNINE PALMS MARINE CORPS TRAINING CENTER
JOSHUA TREE NATIONAL MONUMENT
PALM SPRINGS
ANZA BORREGO DESERT STATE PARK
CHOCOLATE MOUNTAINS AERIAL GUNNERY RANGE
BAKER
NEEDLES
BLYTHE
EL CENTRO
SAN DIEGO
LOS ANGELES
RIVERSIDE

California Desert District

ARIZONA
MEXICO
BLYTHE
EL CENTRO
CHOCOLATE MOUNTAINS AERIAL GUNNERY RANGE
JOSHUA TREE NATIONAL MONUMENT
PALM SPRINGS
ANZA BORREGO DESERT STATE PARK
CORPS TRAINING CENTER
RIVERSIDE
LOS ANGELES
SAN DIEGO
Pacific Ocean
California Desert District
T1N T1S
T5S
T10S
T15S
T18S
R5E
R15E
R16E
R1W
R5W
R10W
N

APPENDIX B

INSTRUCTION MEMORANDUM CA-88-243

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
CALIFORNIA STATE OFFICE
2800 Cottage Way
Sacramento, California 95825

IN REPLY REFER TO:
8200
CA-931.6

WPC3507r

June 7, 1988

Instruction Memorandum No. CA-88-243
Expires: 9-30-89

To: ACOs

From: State Director

Subject: California ACEC Policy and Other Special Area Designations

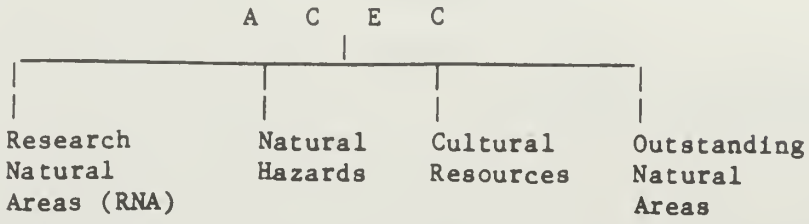
The Bureau of Land Management's responsibility to identify, designate, and manage special areas is clear, based on FLPMA and 43 CFR 1610.7-2. What this memorandum does is clarify the type and extent of special area designations and the relationship between BLM-approved designations, based on the existing 43 CFR authorities and specific designations approved by other agencies. Although this guidance focuses primarily on BLM-approved designations, the relationship between BLM, other agency, and congressionally approved special areas is addressed in the attached naming configuration attachment. For a more detailed analysis of other agency and congressionally approved designations see the 1617 Manual.

During the past 20 years, the BLM has made several efforts at identifying and designating special areas. Each has resulted in an improved definition of the special area concept but has left uncertainties in terms of long-term management.

Over the past three years there has been an effort to clarify the ACEC guidance as it relates to the planning process (1600 Manual Series) and to review existing 43 CFR-related designations as they relate to the Recreation and Natural History program areas. After much analysis, two key factors were identified as essential to the restructuring of these program areas. First, the Bureau has used a number of different designations to identify areas of special interest or with unique and/or outstanding values, e.g., Outstanding Natural Areas (ONA), Research Natural Areas (RNA), ACEC, etc., which has led to a need for an organizational framework. Second, the current authorities for these designations are scattered about in the 43 CFR and in many cases applied inconsistently.

The result of this analysis has been the development of an ACEC "umbrella" concept, under which all special area designations are to be considered areas of critical environmental concern. The purpose is to eliminate the proliferation of designation authorities--some of which are "outdated"--and

to provide a method for absorbing existing valid special area designations (those based on the old 43 CFR citations) under the ACEC designation authority as outlined in FLPMA and 43 CFR 1610. The ACEC "umbrella" concept will have the following structure.



Under this structure, many of the existing special area designations will qualify as an ACEC and fit the four subgroups identified above and in Attachment 1-1 (ACEC Naming Configuration). The purpose of this is to be able to identify the primary values for which the designation is made, and at the same time to reduce the proliferation of titles.

Under this "umbrella" concept, for example, the Ash Valley RNA (under the existing 43 CFR 8200 authority) would be known as the Ash Valley RNA/ACEC (using the 43 CFR 1610.7-2 authority). Examples of the relationships to other designations are explained in Attachment 1.

To implement this policy, California will use the Bureau 1617 Manual (as supplemented by this guidance) as the basis for all new designations and for the review of all existing designations not covered by the ACEC authority.

Existing Designations to be Analyzed for ACEC Status

The recommendation for retention and/or deletion of existing designations should be based on an analysis of the individual records within the Special Area Data Base (SPA) and the 1617 manual as it relates to the planning process.

The following designations will be evaluated using the ACEC criteria found in 43 CFR 1610.1-2 and the 1617 Manual. If the designation meets the criteria, it should be recommended as an ACEC using the planning and/or plan amendment process. If the area does not meet the criteria for designation it should be recommended for deletion using the plan/plan amendment process.

1. Outstanding Natural Area - Existing ONAs may in some cases meet the criteria for ACEC. If so, the area should be recommended as an ACEC (1610.7-2) and conform to ACEC naming configuration guidance. If not, it should be recommended to be deleted and/or considered in other land use decisions, i.e., a Recreation Opportunity Spectrum (ROS) prescriptions, through the planning process.

2. Research Natural Area (RNA) - Existing RNAs in most cases will qualify as an ACEC. The RNA subheading has been retained but redefined. It will use the 43 CFR 1610 authority rather than the 43 CFR 8223 authority for designation.

3. Primitive Area - The Primitive Area designation as defined by 43 CFR 8352 will no longer be used in California because, 1) those areas are considered in the current wilderness study process and 2) the Bureau's ROS structure provides for "classes of recreation opportunities" as a function of its physical, social, and managerial setting characteristics, including primitive or wilderness type values in the ROS prescriptions--i.e., SEMIPRIMITIVE (nonmotorized), and SEMIPRIMITIVE (motorized) and can be used to incorporate these values in the RMP process.

4. Recreational Lands - The Recreational Lands (RL) designation is an obsolete designation as defined by 43 CFR 8352. It no longer serves a purpose, and should be removed from the record in the plan/plan amendment process. California has 19 such designations, most of which are in the CDCA. The Bureau's ROS structure provides for "classes of recreation opportunities" and can be used to incorporate these values in the RMP process.

5. Classification and Multiple Use Designations - The National Wildlife Federation (NWF) suit regarding the elimination of existing CMU classifications (as defined by 43 CFR 2070) has suspended the lifting of any CMU designations and segregations. If these classifications meet the ACEC criteria in the planning process, they should be designated and renamed according to the revised ACEC naming configuration regardless of the disposition of the NWF suit.

New Areas To Be Analyzed for ACEC Status

Areas which meet the ACEC criteria (1617 manual) will be considered in the RMP process and named according to the ACEC naming configuration.

Summary

Areas designated by the BLM in existing land use plans (e.g., Management Framework Plans or early Resource Management Plans) under 43 CFR Part 2070, 8223, and 8352; and authorities other than FLPMA, will be reviewed in subsequent RMPs and/or plan amendments using the procedures identified in 43 CFR 1610. Those areas determined to warrant ACEC designation and which meet the ACEC criteria will be designated using the 43 CFR 1610.7-2 authority and named according to the suggested naming configuration (see Attachment 1).

Ed Hastey

State Director

2 Attachments
Attach 1 - ACEC Naming Configuration (2pp)
Attach 2 - 1617 Manual (27pp)

Distribution
WO 760, Premier Bldg., Rm. 909
DSC 470

Group 1. Research Natural Area: A Research Natural Area (RNA) is a physical and biological unit where natural conditions are maintained insofar as possible, and which is reserved for the primary purpose of research and higher education. These conditions are achieved by allowing ordinary physical and biological processes to operate without human intervention. Management prescriptions are imposed to limit the full range of multiple land uses or allocations. However, under specific conditions, deliberate manipulation intended to maintain the unique features that the RNA/ACEC was designated for may be authorized. RNAs typify important forest, shrub land, grassland, alpine, aquatic, and geologic types or systems in each region; and can also represent unique natural situations which have characteristics of scientific importance and plant communities of limited distribution and research importance, including international research programs such as Man in the Biosphere Reserve system. If proposed land uses conflict with the purposes of an RNA, a withdrawal may be recommended in order to maintain the integrity of the area. Examples of how an RNA will be named are as follows: Reef Ridge RNA, an Area of Critical Environmental Concern, or San Andreas Fault Research Natural Area/National Natural Landmark, an Area of Critical Environmental Concern.

Group 2. Cultural: An area which merits recognition and management beyond that provided through normal resource management for the full range of cultural resources and values. The objective is to manage these areas to conserve the cultural features or values for scientific, education, and/or contemporary ethnic interests. These areas may also be recommended to the National Register of Historic Places or for designation as a National Historic Landmark if they meet the criteria for eligibility. A naming example is as follows: Fort Piute Cultural Site, an Area of Critical Environmental Concern.

Group 3. Hazard: Areas where there are natural hazards which significantly endanger human life, health, or safety. This includes areas, where human visitation or habitation is likely, such as avalanche areas, areas subject to periodic dangerous flooding, areas with unstable soil mantles, areas subject to landslides, seismic areas, cliffs, etc. The objective is to manage these areas to reduce risks to human life, health, or safety; interpret natural phenomena; and/or limit public access if necessary. An example of how an area would be named is as follows: the Hog Hazard Area, an Area of Critical Environmental Concern.

Group 4. Outstanding Natural Area: An area of high public interest which contains outstanding natural features or values (do not confuse with old 43 CFR ONA of similar name). The objective is to conserve these features or values while allowing for public use

(i.e., general scientific, recreation, interpretation, and education compatible with the objectives and values for establishing the outstanding natural area). It includes areas of geologic, botanic, zoologic, paleontologic, and physiographic interest within the region. These areas may also be recommended for designation as a National Natural Landmark if eligible. The level of management required is generally less restrictive than for a RNA/ACEC. Typically, there would be a wider range of uses permitted dependent on the values or resources present.

Typical values:

SCENIC: A scenic area contains features which are of outstanding character which merits recognition and management for its visual resources (scenic quality) beyond the VRM objectives for the area. These areas generally would either have a scenic quality and/or have a management I or II land use classification. An example of naming would be TRONA PINNACLES ONA/NNL/ACEC.

GEOLOGIC or SOILS: An area which contains physical, geologic, and/or soil features and values which merit recognition and management beyond that provided through normal resource management. The objective is to manage these areas to conserve the feature for scientific/educational (interpretive) interests. An example of naming would be EUREKA DUNES ONA/NNL/ACEC.

WILDLIFE or BOTANIC: An outstanding area containing unique plants including riparian areas or animal species or communities that merit recognition and management beyond that provided through normal resource management, meets the ACEC criteria but does not qualify as an RNA. An example of naming would be ERIOPHYLLUM PRESERVE ONA/ACEC.

PALEONTOLOGIC: An outstanding area which contains paleontologic features and values which merit recognition and management beyond that provided through normal resource management. These areas may also be recommended for designation as a National Natural Landmark if they meet the criteria for eligibility. An example of naming would be COYOTE MOUNTAIN FOSSIL ONA/ACEC.

APPENDIX C

SPECIAL AREA DESIGNATIONS RECOMMENDED FOR DELETION

SPECIAL AREA DESIGNATIONS RECOMMENDED FOR DELETION*

Former Special Areas	Designation** Former	Present	Rationale for Deletion of Special Area Designation
Amargosa Canyon	NA	ACEC	Amargosa Canyon ACEC (No. 13) (CDCA Plan, 1980)
Amargosa Canyon/Dumont Dunes	NA	ACEC	Amargosa Canyon ACEC (No. 13); Dumont Dunes OHV Area (CDCA Plan, 1980)
Argus Mountain	PA	------	Did not meet WSA or ACEC criteria
Black Mountain (El Paso Mountain)	PA	------	In El Paso WSA (CDCA-164) (CDCA Plan, 1980)
Bow Willow Palms	RNA	------	In In-Ko-Pah WSA (CDCA-368) (CDCA Plan, 1980)
Carruthers Canyon	ONA	------	In New York Mountains ACEC (No. 31), (CDCA Plan, 1980)
Cerro Coso College	RNA	------	Not qualified for ACEC status
Crucifixion Thorn	NA	------	In Yuha Basin ACEC, (No. 64) (CDCA Plan as amended, 1986)
Darwin Falls	ONA	ACEC	Darwin Falls ACEC (No. 6), (CDCA Plan, 1980)
Dead Indian Creek Scenic Area (CDCA Plan	NA	NSA	In Santa Rosa Montains National Amendment,1990)
Desert Tortoise	NA	RNA/ACEC	Desert Tortoise Research Natural Area (ACEC No. 22) (CDCA Plan, 1980)
Dove Springs, Butterbread, Water Canyon	NA	ACEC	In Jawbone/Butterbread ACEC (No. 20), (CDCA Plan, 1980)

* Plan Clarificatiion

SPECIAL AREA DESIGNATIONS RECOMMENDED FOR DELETION* (cont.)

Former Special Areas	Designation		Rationale for Deletion of Special Area Designation
	Former	Present	
Eureka Dunes	NA	ACEC	Eureka Dunes ACEC (No. 3), (CDCA Plan, 1980)
Fossil Canyon	NA	ACEC	In Coyote Mountains ACEC, (No. 62), (CDCA Plan, 1980)
Great Falls Basin	RNA	ACEC	Great Falls Basin/Argus Range ACEC, (No. 12), (CDCA Plan, 1980)
Indian Springs	ONA	------	In New York Mtn. ACEC, (No. 31), (CDCA Plan, 1980)
Jacumba	ONA	------	In recommended In-Ko-Pah WSA (CDCA-386), (CDCA Plan, 1980)
Milpitas Wash	RNA	------	Within a habitat management area.
Mopah Springs	NA/NRL	ACEC	Mopah Springs ACEC, # 75, (CDCA Plan, 1980)
Rainbow Basin	ONA/NRL	ACEC	Rainbow Basin/Owl Canyon ACEC, (No. 39), (CDCA Plan, 1980)
Signal Mountain	RNA	------	In Yuha Basin ACEC (No. 64), (CDCA Plan, 1980)
Trona Pinnacles	NA/NRL	------	Trona Pinnacles ACEC, (No. 16), (CDCA Plan 1980)
Western Mojave Saltbush	RNA	ACEC/UPA	Barstow Wooly Sunflower ACEC, (No. 36), (CDCA Plan 1980); Western Mojave Saltbush UPA

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* Plan Clarificatiion

** Special Area Designations: ACEC = Area of Critical Environmental Concern; NA = Natural Area; NRL = National Recreation Lands; NSA = National Scenic Area; ONA = Outstanding Natural Area; PA = Primitive Area; RNA = Research Natural Area; UPA = Unusual Plant Assemblage; WSA = Wilderness Study Area

APPENDIX D

AMENDMENTS DEFERRED, NOT CONSIDERED, OR HANDLED THROUGH OTHER ADMINISTRATIVE ACTIONS

AMENDMENTS DROPPED, DEFERRED, OR HANDLED THROUGH ADMINISTRATIVE ACTION

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	BLM's Remarks
89-P-1	Designate an ACEC at Cadiz Dunes (BLM, Needles RA)	These low, vegetated dunes present a unique opportunity for hiking, camping, photography, and the study of interdunal flora and fauna relationships. They are readily accessible by an unmaintained road and are particularly photogenic in the early morning and late evening. Despite the accessibility, a very real sense of solitude can be experienced here. Key resources: scenic quality, vegetation, and wildlife.	ACEC status is not needed. The tallest portion of the dunes at the north end is protected by a vehicle closure. Resources can be managed by controlling recreational use.
89-P-5	Revise the boundary of the Whipple Mountain ACEC (#53) to include Whipple Wash. (BLM, Needles RA)	This extension of the Native American ACEC into the Whipple Wash would acknowledge the botanical values and scenic quality of this unique area.	Defer. Resubmit after further inventory and research has been done to define boundary of area to be included.
89-P-16a	1) Revise the portion of the Livestock Grazing Element of the CDCA Plan on grazing restrictions in desert tortoise habitat. (BLM, Desert District Office)	The CDCA Plan established procedures to allow sheep grazing within highly crucial and crucial desert tortoise habitat, with the goal of maintaining or enhancing tortoise populations. Data from Bureau desert tortoise trend plots reveal that a significant decline in tortoise population is occurring in the West Mojave Desert. All resources and uses are being analyzed for their possible contribution to these declines. Authorization of sheep grazing and present restrictions need to be reviewed and studied for possible connections.	Defer. CDCA Plan amendments on livestock grazing will be addressed in the Habitat Management Plans for the CDCA's four Habitat Management Areas for the desert tortoise. Further analysis of the effect of grazing on the desert tortoise and its habitat will be made, and the restriction for ephemeral forage for livestock grazing will be adjusted if necessary. Each HMP will be subject to plan amendments and NEPA requirements, including public review.
89-P-16b	Increase BLM's requirement for ephemeral forage for livestock grazing from 200 or 350 lb/acre (dry weight) to 1,000 lb/acre within desert tortoise crucial habitats. (Richard Spotts, Defenders of Wildlife)		
89-P-22	Eliminate all subsidized grazing in the East Mojave National Scenic Area. (Peter Burk)	New data not available in 1980: 1) Lack of public input and lack of updated professional inventory make it necessary to either redo all the EMNSA AMPs (allotment management plans) or eliminate grazing altogether. The latter would be cheaper.	Drop. No new data was presented which was not considered when the CDCA Plan was developed. 1) AMP's will continue to be subject to public review in accord with the District's policy of public involvement in the decision process.

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	BLM's Remarks
89-P-22 (cont.)		2) Taxpayers can no longer afford subsidized grazing on marginal lands such as the EMNSA.	2) Congress directs the Secretaries of Interior and Agriculture to collect fees for grazing use on Federal lands and also determines when there will be a change in the fee system.
		3) The desert tortoise and bighorn sheep are at risk, and their populations are declining when subsidized grazing occurs. Eliminating grazing in the EMNSA would stabilize and increase tortoise and bighorn sheep populations in the EMNSA. The East Mojave is a de facto wildlife park. Eliminate cattle grazing before this wildlife resource is lost. We cannot sit idly by while cattle trample tortoise eggs and tortoise burrows and eat the same plants as tortoises. Since the choice seems to be cattle or tortoises, we want to protect tortoises by eliminating cattle.	3) Management of desert tortoise habitat in the East Mojave will be analyzed during preparation of the Ivanpah-Shadow-Kelso and Fenner Chemehuevi Habitat Management Plans which will be initiated in 1992. Cattle grazing and other potentially conflicting uses will also be evaluated. Listing of the tortoise as a threatened species will necessitate Section 7 consultation with the U.S. Fish and Wildlife Service. The consultation request on the Desert District cattle grazing program is in preparation. The East Mojave has sustained cattle grazing for more than 100 years, and the most thriving bighorn sheep populations in the CDCA are in the East Mojave - some within or adjacent to allotments. The BLM is cooperating with the California Department of Fish and Game in studying whether bighorn sheep diseases are caused by the presence of livestock. Future plan amendments will be considered if these findings indicate a conflict between bighorn sheep and cattle use.
		4) The GAO Rangeland Management Report of June 1980 states the need for current inventory on range conditions and trend.	4) The GAO report did not cover the Desert District. Since completion of the CDCA Plan, the Needles RA has established and implemented a program for monitoring range conditions, including those located in the EMNSA.

AMENDMENTS DROPPED, DEFERRED, OR HANDLED THROUGH ADMINISTRATIVE ACTION

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	BLM's Remarks
89-P-18	Adjust Multiple-Use Class (MUC) designations to be consistent with tortoise management categories. (BLM, District Office).	Directives for managing the desert tortoise in Category I and Category II areas are consistent with the MUC guidelines for Class "L" and in some cases are more restrictive.	Defer. Changes in Multiple Use Class designations will be considered when the desert tortoise category boundaries are finalized during preparation of the Habitat Management Plans.
89-P-21	Modify the Barstow to Las Vegas motorcycle race course, as established in the 1982 CDCA plan amendments in two locations. (BLM, Needles RA)	Segment A: Relocate the race course segment between Soda Lake and Interstate 15 to outside the East Mojave National Scenic Area, as recommended in the Scenic Area Plan. Segment B: Bypass the area adjacent to the existing race course near the Colosseum Gold Mine in the Clark Mountains. The mine has pushed bighorn sheep into this area.	Drop. The proposal was replaced by Amendment 89-P-23, which was subsequently replaced by an amendment to revise the portion of the Recreation Element of the CDCA Plan which addresses competitive and noncompetitive motorized vehicle events (see proposal 89-P-27).
89-P-23	Delete Barstow-to-Las Vegas race course from CDCA Plan. (BLM, District Office)	The Barstow to Las Vegas race course was added to the CDCA Plan as a 1982 plan amendment. The event has occurred annually since 1983. In the intervening years, adjustments were made in the course to reduce impacts on wilderness study areas (WSAs), the East Mojave National Scenic Area (EMNSA), private lands, the desert tortoise, and other resources. Monitoring showed that resources were still receiving negative impacts. On an overall basis, it is not possible to meet current criteria of environmental acceptability (the Endangered Species Act and BLM's Desert Tortoise Rangewide Plan).	Drop. This proposal was replaced by an amendment to revise the Recreation Element of the CDCA Plan relating to competitive and noncompetitive motorized vehicle events (see Proposal 89-P-27).

AMENDMENTS DROPPED, DEFERRED, OR HANDLED THROUGH ADMINISTRATIVE ACTION

Prelim. Amend. No.	Amendment	Proponent's Reason for Submission	BLM's Remarks
89-P-24	Delete Stoddard Valley-to-Johnson Valley race course from CDCA Plan. (BLM, District Office)	The Stoddard Valley to Johnson Valley, Johnson Valley to Parker, and Parker 400 race courses were identified in the CDCA Plan in 1980 to provide opportunities for long distance racing. Each of these routes crosses the habitat of the desert tortoise. The dramatic decline in tortoise population in recent years, which led to the emergency listing of the tortoise as a Federally endangered species, has changed the basis of decisions. Authorization for use of any of these courses would have to conform to the Endangered Species Act and the Bureau's Desert Tortoise Rangewide Plan. To allow use of these courses for the purpose intended in the CDCA Plan would cause unacceptable impacts on both the desert tortoise and its habitat.	Same as Proposal 89-P-27.
89-P-25	Delete Johnson Valley-to-Parker race course from CDCA Plan. (BLM, District Office)		Same as Proposal 89-P-27
89-P-26	Delete Parker 400 race course from CDCA Plan. (BLM, District Office)		Same as Proposal 89-P-27
89-P-27	Prohibit competitive motorized vehicle events in desert tortoise management Categories I and II. (BLM, District Office)	Unlike users of other roads, participants in competitive events frequently depart from previously traveled roadways and often travel at speeds which preclude avoidance of tortoises. Competitive events also attract spectators and support personnel who spend time in OHV free-play, collecting, and other activities harmful to tortoise populations. Pits, start cones, and parking areas are extremely deleterious to tortoises because of devegetation and soil compaction. For these purposes, "competitive events" are those in which speed, passing, and finishing first are important elements. Examples include hare-and-hound, scrambles, and enduros.	Defer. Address this topic in an amendment to the Recreation Element of the CDCA Plan to be considered in 1991. The amendment is intended to develop a long range strategy for the management of organized motorized vehicle events on the public lands of the California Desert outside of designated open areas. The amendment will define the conditions under which competitive and noncompetitive motorized events can be permitted on public lands in the CDCA and will attempt to streamline the BLM's OHV event permitting process.

APPENDIX E

PROTEST PROCEDURES

PROTEST PROCEDURES

The resource management planning process includes an opportunity for administrative review via a plan protest to the BLM Director if you believe the approval of the proposed plan amendment would be in error. (See 43 CFR 1610.5-2.) Careful adherence to these guidelines will assist in preparing a protest that will assure the greatest consideration to your point of view.

Only those persons or organizations who participated in our planning process leading to this plan amendment may protest. If our records do not indicate that you had any involvement in any stage in the preparation of this proposed amendment, your protest will be dismissed without further review.

A protesting party may raise only those issues which he or she submitted for the record during the planning process. New issues raised in the protest period should be directed to the California Desert District Manager for consideration in plan implementation, as potential plan amendments, or as otherwise appropriate.

The period for filing a plan protest begins when the California Desert District Manager issues notice of the effective date of the proposed amendments. The protest period extends for 30 days. There is no provision for any extension of time. To be considered "timely," your protest must be postmarked no later than the last day of the protest period. Also, although not a requirement, we suggest that you send your protest by certified mail, return receipt requested.

Protests must be filed in writing to:

Director (WO-760)
Bureau of Land Management
1849 "C: Street, NW
Washington, D.C. 20240

In order to be considered complete, your protest must contain, at a minimum, the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.

2. A statement of the issue or issues being protested.

3. A statement of the part or parts of the proposed plan amendment being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, maps, etc. included in the document.

4. A copy of all documents addressing the issue or issues that you submitted during the planning process or a reference to the date the issue or issues were discussed by you for the record.

5. A concise statement explaining why the proposed decision is believed to be incorrect. This is a critical part of your protest. Take care to document all relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, available planning records (i.e., meeting minutes or summaries, correspondence, etc.) A protest which merely expresses disagreement with the proposed decision, without any data, will not provide us with the benefit of your information and insight. In this case, the Director's review will be based on the existing analysis and supporting data.

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